APPENDIX A

Interacting with the Computer using Speech Input and Speech Output

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Note: This documentation is preliminary and is subject to change.

This topic is a basic introduction to the System.Speech namespace in WinFX.

Interacting with the Computer using Speech Input and Speech Output

Humans prefer to communicate with each other using speech, because of its ease of use and expressiveness. Microsoft is extending this metaphor to human-computer interaction. Our goal is to make the use of speech a viable way of interacting with Microsoft Windows. This will primarily benefit those users who rely on assistive technologies to interact with the computer, but is not limited to these users.

In order to achieve this goal, Microsoft is pursuing a two-pronged strategy:

- Enable common speech scenarios out of the box.
- Provide a managed API to customize and extend the speech experience.

In this document we use the terms speech recognition and speech synthesis, which are commonly used in the industry. The popular press sometimes uses the terms voice recognition and voice output to refer to the same technologies.

Overview of Speech Recognition

Speech recognition is the process of converting audio into text. Speech recognition systems are based on algorithms that model human speech, both the sounds that make up a language as well as the word sequences that are commonly used. They use digital signal processing methods and powerful search algorithms to determine the sequence of words the user spoke. The diagram below shows the major components of a speech recognition system.

☒ Conceptual

The acoustic models are provided by the speech recognition sub-system (SR engine). They express the way humans pronounce the basic units of speech (phonemes) in a given language. The SR engine comes pre-configured with models which are averaged over a large set of speakers, male and female, of a given language. In order to get better recognition performance the models are trained on the user's machine. Training is done explicitly via a training wizard, or implicitly by observing the user.

The language model describes in a statistical fashion the likelihood of specific word sequences occurring at a given time. In other words, what is the probability of the word "America" following the words "United States of"? These statistics are determined by analyzing a large collection of written and spoken text. Because of their statistical nature, they are flexible - any word sequence has some, albeit small,

probability of occurring - but lack the rigor required for high recognition accuracy.

Grammars on the other hand explicitly define all the allowable word sequences for a given recognition. They are commonly expressed as context-free grammars (CFGs) or finite-state machines (FSM). While lacking the flexibility of language models - not all word sequences are allowed - they tend to result in higher recognition accuracy. Because they are specific to an application, or an application state, they have to be authored by the application developer or a team member proficient in creating context-free grammars. They can be expressed using a standardized markup language, and/or programmatically through the use of objects in the System.Speech.Srgs namespace.

The following list shows some strengths of speech recognition technology:

- Speech recognition technology is natural. We can express what we want the computer to do rather than breaking a task down into individual steps for mouse or keyboard execution.
- Speech recognition technology is efficient. Most people can talk much faster than they can type.
- Speech recognition technology is good at referring to items that are not on visible on the screen, and so cannot be selected or clicked using the mouse or keyboard.
- Speech recognition technology is flexible. Developers can create parameterized voice macros.

The following list shows some weaknesses of speech for interacting with the computer:

- Speech recognition technology is not effective for fine positioning of the cursor. The mouse or keyboard are much more accurate.
- Using speech recognition technology might result in some lack of privacy. Others in the vicinity can overhear us speaking to a computer.

Overview of Speech Synthesis

Speech synthesis or text-to-speech (TTS) is the process of converting written text into audio. The text (expressed as a basic string that can contain standardized XML-based markup) is normalized by the TTS engine (the text "23" is converted into the words "twenty three") and used to generate a waveform using a particular voice. A voice describes how the basic units of speech are to be realized as waveform fragments, which is concatenated by the TTS engine into a single waveform. Speech Synthesis Markup Language (SSML) can be used to change the prosody of the speech. For example, emphasizing the word tomorrow in the phrase "I want to fly to Seattle tomorrow".

Speech in 'Longhorn'

As mentioned above, Microsoft is taking a two-pronged approach to creating a compelling speech interaction model for Windows:

- the common speech scenarios, like speech-enabling menus and buttons, will be enabled system-wide by Microsoft.
- a comprehensive set of managed APIs that follow the WinFX design guidelines allows the developer to extend the basic functionality with application-specific speech commands and behaviors. For example, providing voice shortcuts for common context-sensitive commands.

The last section of this article provides the code for a Hello World example demonstrating speech recognition and speech synthesis, and a brief description of the important parts of the application.

A Hello World Sample

The main objects performing speech recognition are located in the System.Speech.Recognition namespace, and the main objects performing text-to-speech, are located in the System.Speech.Synthesis namespace. At the top of the sample are two using directives that provide links to these namespaces. Note that there is also a third namespace that deals with grammars, not referenced in this sample, System.Speech.SRGS.

The Hello Word sample is a Windows GUI application, which accounts for the using directive identifying the System.Windows.Forms namespace.

Most of the work in this application occurs in the form's Load event handler. The first statement in the event handler initializes a grammar object. The second statement loads the HelloWorld.grxml file into the grammar object. The grxml file contains XML-formatted text specifying grammar rules that comply with the World Wide Web Consortium Speech Recognition Grammar Specification Version 1.0 (W3C SRGS).

The next statement in the form Load event handler registers an event handler for the Recognition event. The Recognition event is raised in a speech application whenever a successful recognition occurs. In the Hello World sample, find the Recognition event handler right after the form Load event handler. One of the event parameters, the RecognitionEventArgs object, provides data for the Recognition, RejectedRecognition, and Hypothesis events.

Look at this statement in particular: v.Speak("You said" + e.Result.Text);

The Result property in this statement returns a RecognitionResult object, which represents the result of the recognition. The Text property of this object contains a concatenation of the spoken words.

The previous statement in the Recognition event handler created a Voice object, v, and in this statement v uses speech synthesis to speak back the recognized phrase, prefaced by the two words "you said."

Code for the Hello World Sample

```
using System;
using System.Windows.Forms;
using System.Speech.Recognition;
using System.Speech.Synthesis;

namespace Microsoft.Speech.HelloWorld
{
    // SpeechRecognition is a WinForm application
    // that demonstrates basic speech recognition
    // and speech synthesis functionalities
    public class SpeechRecognition : Form
    {
        // The main entry point for the application.
        [STAThread]
        static void Main()
        {
            Application.Run(new SpeechRecognition());
        }

        // Initializes SpeechRecognition form.
```

```
public SpeechRecognition()
{
    InitializeComponent();
}

protected override void Dispose( bool disposing )
        {
    // Wizard-generated code not shown
        }

// Main form load method
private void SpeechRecognition_Load(object sender, EventArgs e)
{
    // Create grammar object that will hold the CFG
    Grammar g = new Grammar();

    // Load SRGS file containing the HelloWorld grammar
    g.Load("HelloWorld.grxml");

    // Set up the recognition event handler
    g.Recognition +=
          new RecognitionEventHandler(RecognitionEvent);

    // Tell the recognizer to start listening for
    // phrases specified in HelloWorld.grxml
    g.IsActive = true;
}

// Speak the text of what was recognized
private void RecognitionEvent(object s, RecognitionEventArgs e)
{
    Voice v = new Voice();
    v.Speak("You said " + e.Result.Text);
}

#region Windows Form Designer generated code
}
```

Conclusion

Microsoft intends to make speech a much more appealing way of interacting with Microsoft Windows. To further that goal, "Longhorn" will support a number of common speech scenarios for free. In addition, "Longhorn" will include a managed API which will allow developers to customize and extend the speech experience. This article provides an introduction to speech technology, and the Speech namespaces in "Longhorn."

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Namespaces

Note: This documentation is preliminary and is subject to change.

The following table lists the namespaces available for WinFX.

System.Speech.Recognition	The following tables list the members exposed by the System.Speech.Recognition namespace.
System.Speech.Srgs	The following tables list the members exposed by the System.Speech.Srgs namespace.
System.Speech.Synthesis	The following tables list the members exposed by the System.Speech.Synthesis namespace.

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System.Speech.Recognition

Note: This documentation is preliminary and is subject to change.

The following tables list the members exposed by the System.Speech.Recognition namespace.

Classes

ActiveCategoryChangedEventArgs	Provides data for the ActiveCategoryChangedEventArgs event.
AudioContentChangedEventArgs	Provides data for the AudioContentChanged event.
BookmarkEventArgs	Provides data for the BookmarkReached event.
Category	Represents a type of recognition of a speech synthesis resource.
CommandRecognitionEventArgs	Provides data for the CommandRecognition event in the Command and CommandSet objects.
DictationGrammar	Contains individual rules and dictation grammars.
DisplayToken	Represents a token, in western languages this is typically a word, that was recognized by the speech recognizer.
DisplayTokenCollection	Represents a collection of recognized tokens.
Grammar	The Grammar class is a logical housing for individual recognition rules and dictation grammars
GrammarCollection	Represents a collection of Grammar objects.
InterferenceEventArgs	Provides data for the Interference event.
LocalRecognizer	This class allows applications to create a private instance of a Recognizer in their own address space.
RecognitionAudio	Contains the audio data and methods for a specific RecognitionResult or a portion of a RecognitionResult.
RecognitionEventArgs	Provides data for the Recognition, RejectedRecognition, and Hypothesis events.
RecognitionPhrase	Represents the phrase that was recognized by the

	recognizer.
RecognitionPhraseAlternate	Contains information about an alternate recognition by the speech recognizer.
RecognitionPhraseAlternateCollection	A collection of alternatives for a specific result.
RecognitionResult	Represents the result when a speech recognizer processes audio and attempts to recognize user speech.
RecognitionRule	Represents the rule that allowed the associated result to be recognized.
RecognitionRuleCollection	Provides a collection of rules.
RecognizeCompletedEventArgs	Provides event arguments for the RecognizeCompleted event.
RecognizeProgressChangedEventArgs	Provides data for the RecognizeProgressChanged event.
RecognizerAttributes	Represents the attributes various speech recognizers may, or may not support.
RecognizerProperties	Represents recognizer properties that are adjustable at runtime.
Recognizers	Represents a collection of speech recognizers.
RecognizerStateChangedEventArgs	Provides data for the RecognizerStateChanged event.
Rule	Represents a grammar rule.
RuleCollection	Represents a collection of Rules.
SemanticProperty	Represents a single semantic property that may contain additional levels of semantic information.
SemanticPropertyCollection	Represents a collection of semantic properties.
SpeechEventArgs	Provides data for these events: NoRecognition, AudioLevelChanged, RecognitionStarted, RecognitionStopped, RecognitionCanceled, RecognitionPaused, and RecognitionResumed.
SpokenToken	Represents a token, in western languages this is typically a word , that was recognized by the speech recognizer.
SpokenTokenCollection	Represents a collection of recognized tokens.
SystemRecognizer	Represents the shared recognizer.
UpdateEventArgs	Provides data for the Update event.

Interfaces

IRecognizer Provides an interface representing a speech recognizer.

Enumerations

AdaptationRelevance Specifies an estimate of the language model data relevance.

AdaptationSettings	Specifies the options to use with the AdaptLanguageModel method to control the language model adaptation process.
AudioContent	Specifies the current audio state.
Confidence	Specifies the various high level confidence values possible for speech recognition.
InterferenceType	Specifies the types of interference in the audio input preventing an optimal speech recognition experience.
LeadingSpace	Specifies how to handle leading space when incorporating RecognitionResult text into surrounding text.
RecognizeMode	Specifies the recognition mode.
RecognizerState	Specifies the current state of the recognizer.
ResultType	Specifies the types of recognition result that can be sent.
TrailingSpace	Specifies how to handle trailing space when incorporating the RecognitionResult's text into surrounding text.

Structures

DictationTopic Represents a dictation topic.

Delegates

ActiveCategoryChangedEventHandler	Represents the method that will handle the ActiveCategoryChangedEventHandler event.
AudioContentChangedEventHandler	Represents the method that will handle the AudioContentChanged event.
BookmarkEventHandler	Represents the method that will handle the Bookmark event.
CommandRecognitionEventHandler	Represents the method that will handle the CommandRecognition event in Command and CommandSet.
InterferenceEventHandler	Represents the method that will handle the InterferenceDetected event.
RecognitionEventHandler	Represents the method that will handle the following events: Recognition, RejectedRecognition, and Hypothesis.
RecognizeCompletedEventHandler	Represents the method that will handle the RecognizeCompleted event.
RecognizeProgressChangedEventHandler	Represents the method that will handle the RecognizeProgressChanged event.
RecognizerStateChangedEventHandler	Represents the method that will handle the RecognizerStateChanged event.
SpeechEventHandler	Represents the method that will handle the following events: NoRecognition, AudioLevelChanged, RecognitionStarted, RecognitionStopped, RecognitionCanceled,

	RecognitionPaused, and RecognitionResumed.
UpdateEventHandler	Represents the methods that handle the Updated event and related events.

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ActiveCategoryChangedEventArgs Class

Note: This documentation is preliminary and is subject to change.

Provides data for the ActiveCategoryChangedEventArgs event.

Definition

Visual Basic	Public Class **ActiveCategoryChangedEventArgs** Inherits *SpeechEventArgs*
C#	public class **ActiveCategoryChangedEventArgs** : *SpeechEventArgs*
Managed C++	public __gc class **ActiveCategoryChangedEventArgs** : public *SpeechEventArgs*
JScript	public class **ActiveCategoryChangedEventArgs** extends *SpeechEventArgs*

Members Table

Inheritance Hierarchy

Object
EventArgs
SpeechEventArgs
ActiveCategoryChangedEventArgs

Class Information

Namespace	System.Speech.Recognition
Assembly	System.Speech (system.speech.dll)
Strong Name	System.Speech, Version=6.0.4044.0, Culture=neutral, PublicKeyToken=365143bb27e7ac8b

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ActiveCategoryChangedEventArgs Method

Note: This documentation is preliminary and is subject to change.

Initializes a new instance of the ActiveCategoryChangedEventArgs class.

Definition

Visual Basic
```
Public Sub ActiveCategoryChangedEventArgs( _
   ByVal audioPosition As TimeSpan, _
   ByVal activeCategory As Category _
)
```

C#
```
public ActiveCategoryChangedEventArgs(
   TimeSpan audioPosition,
   Category activeCategory
);
```

Managed C++
```
public: ActiveCategoryChangedEventArgs(
   TimeSpan audioPosition,
   Category* activeCategory
);
```

JScript
```
public function ActiveCategoryChangedEventArgs(
   audioPosition : TimeSpan,
   activeCategory : Category
);
```

Parameters

audioPosition **System.TimeSpan**. Placeholder
activeCategory **System.Speech.Recognition.Category**. Specifies the active category.

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ActiveCategory Property

Note: This documentation is preliminary and is subject to change.

Gets the new active category.

Definition

Visual Basic Public ReadOnly Property **ActiveCategory** As Category
C# public Category **ActiveCategory** { get; }
Managed C++ public: __property Category* get_**ActiveCategory**();
JScript public function get **ActiveCategory**() : Category

Property Value

System.Speech.Recognition.Category.

This property is read-only.

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AudioContentChangedEventArgs Class

Note: This documentation is preliminary and is subject to change.

Provides data for the AudioContentChanged event.

Definition

Visual Basic	Public Class **AudioContentChangedEventArgs** Inherits *SpeechEventArgs*
C#	public class **AudioContentChangedEventArgs** : *SpeechEventArgs*
Managed C++	public __gc class **AudioContentChangedEventArgs** : public *SpeechEventArgs*
JScript	public class **AudioContentChangedEventArgs** extends *SpeechEventArgs*

Members Table

Inheritance Hierarchy

Object
EventArgs
SpeechEventArgs
AudioContentChangedEventArgs

Class Information

Namespace	System.Speech.Recognition
Assembly	System.Speech (system.speech.dll)
Strong Name	System.Speech, Version=6.0.4044.0, Culture=neutral, PublicKeyToken=365143bb27e7ac8b

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AudioContentChangedEventArgs Method

Note: This documentation is preliminary and is subject to change.

Initializes a new instance of the AudioContentChangedEventArgs class.

Definition

Visual Basic
```
Public Sub AudioContentChangedEventArgs( _
   ByVal audioPosition As TimeSpan, _
   ByVal content As AudioContent _
)
```

C#
```
public AudioContentChangedEventArgs(
   TimeSpan audioPosition,
   AudioContent content
);
```

Managed C++
```
public: AudioContentChangedEventArgs(
   TimeSpan audioPosition,
   AudioContent content
);
```

JScript
```
public function AudioContentChangedEventArgs(
   audioPosition : TimeSpan,
   content : AudioContent
);
```

Parameters

audioPosition **System.TimeSpan**. Placeholder
content **System.Speech.Recognition.AudioContent**. Updated input audio content.

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Content Property

Note: This documentation is preliminary and is subject to change.

Gets the updated audio content.

Definition

Visual Basic Public ReadOnly Property **Content** As AudioContent
C# public AudioContent **Content** { get; }
Managed C++ public: __property AudioContent get_Content();
JScript public function get **Content**() : AudioContent

Property Value

System.Speech.Recognition.AudioContent.

This property is read-only.

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BookmarkEventArgs Class

Note: This documentation is preliminary and is subject to change.

Provides data for the BookmarkReached event.

Definition

Visual Basic	Public Class **BookmarkEventArgs** Inherits *SpeechEventArgs*
C#	public class **BookmarkEventArgs** : *SpeechEventArgs*
Managed C++	public __gc class **BookmarkEventArgs** : public *SpeechEventArgs*
JScript	public class **BookmarkEventArgs** extends *SpeechEventArgs*

Members Table

Inheritance Hierarchy

Object Leave
EventArgs Leave
SpeechEventArgs
BookmarkEventArgs

Class Information

Namespace	System.Speech.Recognition
Assembly	System.Speech (system.speech.dll)
Strong Name	System.Speech, Version=6.0.4044.0, Culture=neutral, PublicKeyToken=365143bb27e7ac8b

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BookmarkEventArgs Method

Note: This documentation is preliminary and is subject to change.

Initializes a new instance of the BookmarkEventArgs class.

Definition

Visual Basic
```
Public Sub BookmarkEventArgs( _
   ByVal audioPosition As TimeSpan, _
   ByVal tag As Object _
)
```

C#
```
public BookmarkEventArgs(
   TimeSpan audioPosition,
   object tag
);
```

Managed C++
```
public: BookmarkEventArgs(
   TimeSpan audioPosition,
   Object* tag
);
```

JScript
```
public function BookmarkEventArgs(
   audioPosition : TimeSpan,
   tag : Object
);
```

Parameters

audioPosition **System.TimeSpan**. Placeholder
tag **System.Object**. Application supplied object reference.

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Tag Property

Note: This documentation is preliminary and is subject to change.

Gets an application-supplied object reference.

Definition

Visual Basic
```
Public ReadOnly Property Tag As Object
```

C#
```
public object Tag { get; }
```

Managed C++
```
public: __property Object* get_Tag();
```

JScript
```
public function get Tag() : Object
```

Property Value

System.Object.

This property is read-only.

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Category Class

Note: This documentation is preliminary and is subject to change.

Represents a type of recognition of a speech synthesis resource.

Definition

Visual Basic	Public Class **Category** Inherits *Object*
C#	public class **Category** : *Object*
Managed C++	public __gc class **Category** : public *Object*
JScript	public class **Category** extends *Object*

Members Table

Inheritance Hierarchy

Object

Leave

Category

Class Information

Namespace	System.Speech.Recognition
Assembly	System.Speech (system.speech.dll)
Strong Name	System.Speech, Version=6.0.4044.0, Culture=neutral, PublicKeyToken=365143bb27e7ac8b

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Category Method

Note: This documentation is preliminary and is subject to change.

Creates a new Command subcategory.

Overload List

public Category ()
public Category (Category)

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Dispose Method

Note: This documentation is preliminary and is subject to change.

Overload List

protected virtual Void Dispose (Boolean)
protected virtual Void Dispose ()

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Finalize Method

Note: This documentation is preliminary and is subject to change.

Implements the actions required to destruct an instance of the Category class.

Definition

Visual Basic	Overrides Protected Sub **Finalize**()
C#	**~Category**();
Managed C++	**~Category**();
JScript	protected override function **Finalize**() : **void**;

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Command Property

Note: This documentation is preliminary and is subject to change.

Returns the predefined Command category.

Definition

Visual Basic	Public Shared ReadOnly Property **Command** As Category
C#	public static Category **Command** { get; }
Managed C++	public: __property static Category* get_**Command**();
JScript	public static function get **Command**() : Category

Property Value

System.Speech.Recognition.Category.

This property is read-only.

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Dictation Property

Note: This documentation is preliminary and is subject to change.

Returns the predefined Dictation category.

Definition

Visual Basic	Public Shared ReadOnly Property **Dictation** As Category
C#	public static Category **Dictation** { get; }
Managed C++	public: __property static Category* get_**Dictation**();
JScript	public static function get **Dictation**() : Category

Property Value

System.Speech.Recognition.Category.

This property is read-only.

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Icon Property

Note: This documentation is preliminary and is subject to change.

Gets or sets the icon representing the category.

Definition

Visual Basic	Public Property **Icon** As **Icon**
C#	public **Icon** **Icon** { get; set; }
Managed C++	public: __property **Icon*** get_**Icon**(); public: __property void set_**Icon**(**Icon***);
JScript	public function get **Icon**() : **Icon** public function set **Icon**(**Icon**);

Property Value

System.Drawing.Icon.

This property is read/write.

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IsActive Property

Note: This documentation is preliminary and is subject to change.

Gets or sets a value that specifies whether the category is enabled.

Definition

Visual Basic	Public Property **IsActive** As **Boolean**
C#	public **bool** **IsActive** { get; set; }
Managed C++	public: __property **bool** get_**IsActive**(); public: __property void set_**IsActive**(**bool**);
JScript	public function get **IsActive**() : **boolean** public function set **IsActive**(**boolean**);

Property Value

System.Boolean.

This property is read/write.

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IsPrefixRequired Property

Note: This documentation is preliminary and is subject to change.

Gets or sets a value that specifies whether a prefix is required to access grammars associated with the category.

Definition

Visual Basic	Public Property **IsPrefixRequired** As **Boolean**
C#	public **bool IsPrefixRequired** { get; set; }
Managed C++	public: __property **bool** get_**IsPrefixRequired**(); public: __property void set_**IsPrefixRequired**(**bool**);
JScript	public function get **IsPrefixRequired**() : **boolean** public function set **IsPrefixRequired**(**boolean**);

Property Value

System.Boolean.

This property is read/write.

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Name Property

Note: This documentation is preliminary and is subject to change.

Gets or sets the name of the category.

Definition

Visual Basic	Public Property **Name** As **String**
C#	public **string Name** { get; set; }
Managed C++	public: __property **String*** get_**Name**(); public: __property void set_**Name**(**String***);
JScript	public function get **Name**() : **String** public function set **Name**(**String**);

Property Value

System.String.

This property is read/write.

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Prefix Property

Note: This documentation is preliminary and is subject to change.

Gets or sets the prefix for accessing grammars associated with the category.

Definition

Visual Basic	Public Property **Prefix** As **String**
C#	public **string Prefix** { get; set; }
Managed C++	public: __property **String*** get_**Prefix**(); public: __property void set_**Prefix**(**String***);
JScript	public function get **Prefix**() : **String** public function set **Prefix**(**String**);

Property Value

System.String.

This property is read/write.

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CommandRecognitionEventArgs Class

Note: This documentation is preliminary and is subject to change.

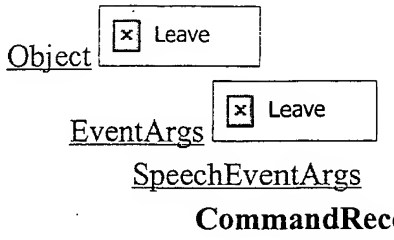
Provides data for the CommandRecognition event in the Command and CommandSet objects.

Definition

Visual Basic	Public Class **CommandRecognitionEventArgs** Inherits *SpeechEventArgs*
C#	public class **CommandRecognitionEventArgs** : *SpeechEventArgs*
Managed C++	public __gc class **CommandRecognitionEventArgs** : public *SpeechEventArgs*
JScript	public class **CommandRecognitionEventArgs** extends *SpeechEventArgs*

Members Table

Inheritance Hierarchy



Class Information

Namespace	System.Speech.Recognition
Assembly	System.Speech (system.speech.dll)
Strong Name	System.Speech, Version=6.0.4044.0, Culture=neutral, PublicKeyToken=365143bb27e7ac8b

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CommandRecognitionEventArgs Method

Note: This documentation is preliminary and is subject to change.

Initializes a new instance of the CommandRecognitionEventArgs class.

Definition

Visual Basic	Public Sub **CommandRecognitionEventArgs**()
C#	public **CommandRecognitionEventArgs**();
Managed C++	public: **CommandRecognitionEventArgs**();
JScript	public function **CommandRecognitionEventArgs**();

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DictationGrammar Class

Note: This documentation is preliminary and is subject to change.

Contains individual rules and dictation grammars.

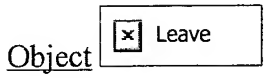
Definition

Visual Basic	Public Class **DictationGrammar** Inherits *Grammar*
C#	public class **DictationGrammar** : *Grammar*

Managed C++ public __gc class **DictationGrammar** : public *Grammar*
JScript public class **DictationGrammar** extends *Grammar*

Members Table

Inheritance Hierarchy



Object
Grammar
DictationGrammar

Class Information

Namespace System.Speech.Recognition
Assembly System.Speech (system.speech.dll)
Strong Name System.Speech, Version=6.0.4044.0, Culture=neutral, PublicKeyToken=365143bb27e7ac8b

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DictationGrammar Method

Note: This documentation is preliminary and is subject to change.

Initializes the DictationGrammar class.

Overload List

public DictationGrammar ()
public DictationGrammar (IRecognizer)
public DictationGrammar (String)

Remarks

The Grammar will be assigned to the default GrammarGroup for the specified Recognizer.

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Load Method

Note: This documentation is preliminary and is subject to change.

Loads a grammar from a stream.

Overload List

public override Void Load (Stream)
public override Void Load (DictationTopic)

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AllowUpdateOnRecognition Property

Note: This documentation is preliminary and is subject to change.

Gets or sets a value that specifies whether the recognition engine temporarily pauses recognition processing while the Recognition event is being processed.

Definition

Visual Basic	Overrides Public Property **AllowUpdateOnRecognition** As **Boolean**
C#	public override **bool AllowUpdateOnRecognition** { get; set; }
Managed C++	public: __property virtual **bool** get_**AllowUpdateOnRecognition**(); public: __property virtual void set_**AllowUpdateOnRecognition**(**bool**);
JScript	public function get **AllowUpdateOnRecognition**() : **boolean** public function set **AllowUpdateOnRecognition**(**boolean**);

Property Value

System.Boolean.

This property is read/write.

Remarks

This is useful if the application wants to change the grammar or stop the recognizer immediately after a recognition result is produced, before the recognizer has processed any additional audio. If you set it to true then very little appears different, but any grammar changes you make during recognition events are synchronous. By default this is false.

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PreceedingText Property

Note: This documentation is preliminary and is subject to change.

Gets or sets text to insert immediately before the current selection in the document.

Definition

Visual Basic	Public Property **PreceedingText** As **String**
C#	public **string PreceedingText** { get; set; }
Managed C++	public: __property **String*** get_**PreceedingText**(); public: __property void set_**PreceedingText**(**String***);
JScript	public function get **PreceedingText**() : **String** public function set **PreceedingText**(**String**);

Property Value

System.String.

This property is read/write.

Remarks

This is used by the recognition engine to do more accurate dictation because it knows the words before where the dictation is occurring.

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SelectedText Property

Note: This documentation is preliminary and is subject to change.

Gets or sets selected text in the document.

Definition

Visual Basic	Public Property **SelectedText** As **String**
C#	public **string SelectedText** { get; set; }
Managed C++	public: __property **String*** get_**SelectedText**(); public: __property void set_**SelectedText**(**String***);
JScript	public function get **SelectedText**() : **String** public function set **SelectedText**(**String**);

Property Value

System.String.

This property is read/write.

Remarks

This property can be used to inform the engine of any selected text in the document.

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SubsequentText Property

Note: This documentation is preliminary and is subject to change.

Gets or sets text to insert immediately after the current selection in the document.

Definition

Visual Basic	Public Property **SubsequentText** As **String**
C#	public **string SubsequentText** { get; set; }
Managed C++	public: __property **String*** get_**SubsequentText**(); public: __property void set_**SubsequentText**(**String***);
JScript	public function get **SubsequentText**() : **String** public function set **SubsequentText**(**String**);

Property Value

System.String.

This property is read/write.

Remarks

This is used by the recognition engine to do more accurate dictation because it knows the words after where the dictation is occurring.

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Topic Property

Note: This documentation is preliminary and is subject to change.

Gets the current dictation topic.

Definition

Visual Basic Public ReadOnly Property **Topic** As **DictationTopic**

C#	public **DictationTopic Topic** { get; }
Managed C++	public: __property **DictationTopic** get_**Topic**();
JScript	public function get **Topic**() : **DictationTopic**

Property Value

System.Speech.Recognition.DictationTopic.

This property is read-only.

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DisplayToken Class

Note: This documentation is preliminary and is subject to change.

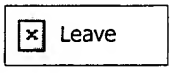
Represents a token, in western languages this is typically a word, that was recognized by the speech recognizer.

Definition

Visual Basic	Public Class **DisplayToken** Inherits *Object*
C#	public class **DisplayToken** : *Object*
Managed C++	public __gc class **DisplayToken** : public *Object*
JScript	public class **DisplayToken** extends *Object*

Members Table

Inheritance Hierarchy

Object 

DisplayToken

Class Information

Namespace	System.Speech.Recognition
Assembly	System.Speech (system.speech.dll)
Strong Name	System.Speech, Version=6.0.4044.0, Culture=neutral, PublicKeyToken=365143bb27e7ac8b

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ToString Method

Note: This documentation is preliminary and is subject to change.

Gets the display text of the token.

Definition

Visual Basic	Overrides Public Function **ToString**() As **String**
C#	public override **string ToString**();
Managed C++	public: **String*** **ToString**();
JScript	public override function **ToString**() : **String**;

Return Value

System.String.

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Audio Property

Note: This documentation is preliminary and is subject to change.

Gets the captured audio that corresponds to this recognized token.

Definition

Visual Basic	Public ReadOnly Property **Audio** As **RecognitionAudio**
C#	public **RecognitionAudio** **Audio** { get; }
Managed C++	public: __property **RecognitionAudio*** get_**Audio**();
JScript	public function get **Audio**() : **RecognitionAudio**

Property Value

System.Speech.Recognition.RecognitionAudio.

This property is read-only.

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LeadingSpace Property

Note: This documentation is preliminary and is subject to change.

Gets the leading space requirements for this token.

Definition

Visual Basic	Public ReadOnly Property **LeadingSpace** As **LeadingSpace**
C#	public **LeadingSpace** **LeadingSpace** { get; }
Managed C++	public: __property **LeadingSpace** get_**LeadingSpace**();
JScript	public function get **LeadingSpace**() : **LeadingSpace**

Property Value

System.Speech.Recognition.LeadingSpace.

This property is read-only.

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SpokenTokens Property

Note: This documentation is preliminary and is subject to change.

Gets the collection of tokens that that was recognized by the speech recognizer.

Definition

Visual Basic	Public ReadOnly Property **SpokenTokens** As **SpokenTokenCollection**
C#	public **SpokenTokenCollection** **SpokenTokens** { get; }
Managed C++	public: __property **SpokenTokenCollection*** get_**SpokenTokens**();
JScript	public function get **SpokenTokens**() : **SpokenTokenCollection**

Property Value

System.Speech.Recognition.SpokenTokenCollection.

This property is read-only.

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Text Property

Note: This documentation is preliminary and is subject to change.

Gets the display text of the token.

Definition

Visual Basic	Public ReadOnly Property **Text** As **String**
C#	public **string Text** { get; }
Managed C++	public: __property **String*** get_**Text**();
JScript	public function get **Text**() : **String**

Property Value

System.String.

This property is read-only.

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TrailingSpace Property

Note: This documentation is preliminary and is subject to change.

Gets the trailing space requirements for this token.

Definition

Visual Basic	Public ReadOnly Property **TrailingSpace** As **TrailingSpace**
C#	public **TrailingSpace TrailingSpace** { get; }
Managed C++	public: __property **TrailingSpace** get_**TrailingSpace**();
JScript	public function get **TrailingSpace**() : **TrailingSpace**

Property Value

System.Speech.Recognition.TrailingSpace.

This property is read-only.

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DisplayTokenCollection Class

Note: This documentation is preliminary and is subject to change.

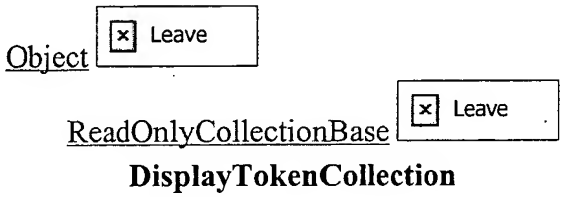
Represents a collection of recognized tokens.

Definition

Visual Basic	Public Class **DisplayTokenCollection** Inherits *ReadOnlyCollectionBase*
C#	public class **DisplayTokenCollection** : *ReadOnlyCollectionBase*
Managed C++	public __gc class **DisplayTokenCollection** : public *ReadOnlyCollectionBase*
JScript	public class **DisplayTokenCollection** extends *ReadOnlyCollectionBase*

Members Table

Inheritance Hierarchy



Class Information

Namespace	System.Speech.Recognition
Assembly	System.Speech (system.speech.dll)
Strong Name	System.Speech, Version=6.0.4044.0, Culture=neutral, PublicKeyToken=365143bb27e7ac8b

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GetAlternates Method

Note: This documentation is preliminary and is subject to change.

Gets a collection of alternates specified by a range of tokens in the result.

Overload List

public RecognitionPhraseAlternateCollection GetAlternates (Int32, Int32)
public RecognitionPhraseAlternateCollection GetAlternates (Int32, Int32, Int32)

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GetAudio Method

Note: This documentation is preliminary and is subject to change.

Gets the captured audio that corresponds to the specified range of tokens in this collection.

Definition

Visual Basic

```
Public Function GetAudio( _
   ByVal firstToken As Integer, _
   ByVal countOfTokens As Integer _
) As RecognitionAudio
```

C#

```
public RecognitionAudio GetAudio(
   int firstToken,
   int countOfTokens
);
```

Managed C++

```
public: RecognitionAudio* GetAudio(
   int firstToken,
   int countOfTokens
);
```

JScript

```
public function GetAudio(
   firstToken : int,
   countOfTokens : int
) : RecognitionAudio;
```

Parameters

firstToken **System.Int32**. The first token to consider

countOfTokens **System.Int32**. The number of tokens to consider

Return Value

System.Speech.Recognition.RecognitionAudio.

An instance of the RecognitionAudio class that represents the captured audio

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GetText Method

Note: This documentation is preliminary and is subject to change.

Gets the text that the specified range of tokens represents.

Definition

Visual Basic
```
Public Function GetText( _
   ByVal firstToken As Integer, _
   ByVal countOfTokens As Integer _
) As String
```

C#
```
public string GetText(
   int firstToken,
   int countOfTokens
);
```

Managed C++
```
public: String* GetText(
   int firstToken,
   int countOfTokens
);
```

JScript
```
public function GetText(
   firstToken : int,
   countOfTokens : int
) : String;
```

Parameters

firstToken **System.Int32**. The first token to consider
countOfTokens **System.Int32**. The number of tokens to consider

Return Value

System.String.

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Audio Property

Note: This documentation is preliminary and is subject to change.

Gets the captured audio that corresponds to this collection of recognized tokens.

Definition

Visual Basic Public ReadOnly Property **Audio** As **RecognitionAudio**
C# public **RecognitionAudio** **Audio** { get; }
Managed C++ public: __property **RecognitionAudio*** get_**Audio**();
JScript public function get **Audio**() : **RecognitionAudio**

Property Value

System.Speech.Recognition.RecognitionAudio.

This property is read-only.

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Item Property

Note: This documentation is preliminary and is subject to change.

Gets the token at the specified position.

Definition

Visual Basic
```
Public ReadOnly Property Item( _
    ByVal index As Integer _
) As DisplayToken
```

C#
```
public DisplayToken this[
    int index
] { get; }
```

Managed C++
```
public: __property DisplayToken* get_Item(
    int index
);
```

JScript In JScript, you can use indexed properties, but you cannot define your own.

Property Value

System.Speech.Recognition.DisplayToken.

This property is read-only.

Parameters

index **System.Int32**.

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LeadingSpace Property

Note: This documentation is preliminary and is subject to change.

Gets the leading space requirements for this fragment of text.

Definition

Visual Basic	Public ReadOnly Property **LeadingSpace** As **LeadingSpace**
C#	public **LeadingSpace** **LeadingSpace** { get; }
Managed C++	public: __property **LeadingSpace** get_**LeadingSpace**();
JScript	public function get **LeadingSpace**() : **LeadingSpace**

Property Value

System.Speech.Recognition.LeadingSpace.

This property is read-only.

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Text Property

Note: This documentation is preliminary and is subject to change.

Gets the text that this collection of token represents.

Definition

Visual Basic	Public ReadOnly Property **Text** As **String**
C#	public **string** **Text** { get; }
Managed C++	public: __property **String*** get_**Text**();
JScript	public function get **Text**() : **String**

Property Value

System.String.

This property is read-only.

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TrailingSpace Property

Note: This documentation is preliminary and is subject to change.

Gets the trailing space requirements for this fragment of text.

Definition

Visual Basic	Public ReadOnly Property **TrailingSpace** As **TrailingSpace**
C#	public **TrailingSpace** **TrailingSpace** { get; }
Managed C++	public: __property **TrailingSpace** get_**TrailingSpace**();
JScript	public function get **TrailingSpace**() : **TrailingSpace**

Property Value

System.Speech.Recognition.TrailingSpace.

This property is read-only.

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Grammar Class

Note: This documentation is preliminary and is subject to change.

The Grammar class is a logical housing for individual recognition rules and dictation grammars

Definition

Visual Basic	Public Class **Grammar** Inherits *Object* Implements *IDisposable*
C#	public class **Grammar** : *Object*, IDisposable
Managed C++	public __gc class **Grammar** : public *Object*, IDisposable
JScript	public class **Grammar** extends *Object* implements *IDisposable*

Members Table

Inheritance Hierarchy

Object [Leave]

Grammar

DictationGrammar

SrgsGrammar

Class Information

Namespace	System.Speech.Recognition
Assembly	System.Speech (system.speech.dll)
Strong Name	System.Speech, Version=6.0.4044.0, Culture=neutral, PublicKeyToken=365143bb27e7ac8b

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Dispose Method

Note: This documentation is preliminary and is subject to change.

Overload List

protected virtual Void Dispose (Boolean)
protected virtual Void Dispose ()

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Finalize Method

Note: This documentation is preliminary and is subject to change.

Releases unmanaged resources and performs other cleanup operations before this instance of the Grammar class is reclaimed by garbage collection.

Definition

Visual Basic	Overrides Protected Sub **Finalize**()
C#	**~Grammar**();
Managed C++	**~Grammar**();
JScript	protected override function **Finalize**() : **void**;

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Grammar Method

Note: This documentation is preliminary and is subject to change.

Initializes a new instance of the Grammar class.

Overload List

public Grammar ()
public Grammar (String)
public Grammar (IRecognizer)

Remarks

The Grammar will be assigned to the default GrammarGroup for the specified Recognizer.

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Load Method

Note: This documentation is preliminary and is subject to change.

Loads a grammar from the specified source URI.

Overload List

public virtual Void Load (String)
public virtual Void Load (Stream)

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AllowUpdateOnRecognition Property

Note: This documentation is preliminary and is subject to change.

Gets or sets a value that specifies whether the recognition engine will pause its recognition processing while the Recognition event is being processed.

Definition

Visual Basic	Overridable Public Property **AllowUpdateOnRecognition** As **Boolean**
C#	public virtual **bool AllowUpdateOnRecognition** { get; set; }
Managed C++	public: __property virtual **bool** get_**AllowUpdateOnRecognition**(); public: __property virtual void set_**AllowUpdateOnRecognition**(**bool**);
JScript	public function get **AllowUpdateOnRecognition**() : **boolean** public function set **AllowUpdateOnRecognition**(**boolean**);

Property Value

System.Boolean.

This property is read/write.

Remarks

Setting this property to true causes the engine to temporarily pause its recognition processing while the Recognition event is being processed. This is useful if the application wants to change the grammar or stop the recognizer immediately after a recognition result is produced, before the recognizer has processed any additional audio. If you set it to true then very little appears different, but any grammar changes you make during recognition events are synchronous. By default this is false.

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BaseUri Property

Note: This documentation is preliminary and is subject to change.

Gets or sets a base URI from which relative paths to rulerefs can be resolved.

Definition

Visual Basic	Public Property **BaseUri** As **String**
C#	public **string BaseUri** { get; set; }
Managed C++	public: __property **String*** get_**BaseUri**(); public: __property void set_**BaseUri**(**String***);
JScript	public function get **BaseUri**() : **String** public function set **BaseUri**(**String**);

Property Value

System.String.

This property is read/write.

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Category Property

Note: This documentation is preliminary and is subject to change.

Gets or sets the category the grammar is associated with.

Definition

Visual Basic	Public Property **Category** As **Category**
C#	public **Category** **Category** { get; set; }
Managed C++	public: __property **Category*** get_**Category**(); public: __property void set_**Category**(**Category***);
JScript	public function get **Category**() : **Category** public function set **Category**(**Category**);

Property Value

System.Speech.Recognition.Category.

This property is read/write.

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IsActive Property

Note: This documentation is preliminary and is subject to change.

Gets or sets a value that specifies whether the grammar is active or not.

Definition

Visual Basic	Public Property **IsActive** As **Boolean**
C#	public **bool** **IsActive** { get; set; }
Managed C++	public: __property **bool** get_**IsActive**(); public: __property void set_**IsActive**(**bool**);
JScript	public function get **IsActive**() : **boolean** public function set **IsActive**(**boolean**);

Property Value

System.Boolean.

This property is read/write.

Remarks

For a rule to be recognized, it has to be top level, it has to be active, and it has to be housed in an active grammar.

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ListTextBuffer Property

Note: This documentation is preliminary and is subject to change.

Like the TextBuffer, this is used with the <textbuffer> element to allow a user to speak a sub-string of text. This field is different because any sub-string of an array of strings can be spoken.

Definition

Visual Basic	Public Property **ListTextBuffer** As **String**()
C#	public **string**[] **ListTextBuffer** { get; set; }
Managed C++	public: __property **String*** get_**ListTextBuffer**(); public: __property void set_**ListTextBuffer**(**String***);
JScript	public function get **ListTextBuffer**() : **String**[] public function set **ListTextBuffer**(**String**[]);

Property Value

System.String.

This property is read/write.

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Name Property

Note: This documentation is preliminary and is subject to change.

Gets or sets the name of a grammar contained in a GrammarGroup or RecognitionResults.

Definition

Visual Basic	Public Property **Name** As **String**
C#	public **string** **Name** { get; set; }
Managed C++	public: __property **String*** get_**Name**(); public: __property void set_**Name**(**String***);
JScript	public function get **Name**() : **String** public function set **Name**(**String**);

Property Value

System.String.

This property is read/write.

Remarks

Each grammar has a name. This name can be used to identify a grammar in its containing GrammarGroup and in RecognitionResults

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Recognizer Property

Note: This documentation is preliminary and is subject to change.

Gets or sets the speech recognizer that hosts this grammar.

Definition

Visual Basic	Public Property **Recognizer** As **IRecognizer**
C#	public **IRecognizer Recognizer** { get; set; }
Managed C++	public: __property **IRecognizer*** get_**Recognizer**(); public: __property void set_**Recognizer**(**IRecognizer***);
JScript	public function get **Recognizer**() : **IRecognizer** public function set **Recognizer**(**IRecognizer**);

Property Value

System.Speech.Recognition.IRecognizer.

This property is read/write.

Remarks

If a recognizer is not already set when the property's get accessor is called, a new recognizer will be created.

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RootRule Property

Note: This documentation is preliminary and is subject to change.

Gets the root rule of the grammar.

Definition

Visual Basic	Public ReadOnly Property **RootRule** As **Rule**
C#	public **Rule RootRule** { get; }
Managed C++	public: __property **Rule*** get_**RootRule**();
JScript	public function get **RootRule**() : **Rule**

Property Value

System.Speech.Recognition.Rule.

This property is read-only.

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SharingUri Property

Note: This documentation is preliminary and is subject to change.

Gets or sets a name to use in rulerefs when referencing this grammar from other grammars.

Definition

Visual Basic	Public Property **SharingUri** As **String**
C#	public **string SharingUri** { get; set; }
Managed C++	public: __property **String*** get_**SharingUri**(); public: __property void set_**SharingUri**(**String***);
JScript	public function get **SharingUri**() : **String** public function set **SharingUri**(**String**);

Property Value

System.String.

This property is read/write.

Remarks

Setting this property allows grammars that are dynamically built or edited to be referenced in rulerefs.

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TextBuffer Property

Note: This documentation is preliminary and is subject to change.

Gets or sets the text from which a sub-range can be selected.

Definition

Visual Basic	Public Property **TextBuffer** As **String**
C#	public **string** **TextBuffer** { get; set; }
Managed C++	public: __property **String*** get_**TextBuffer**(); public: __property void set_**TextBuffer**(**String***);
JScript	public function get **TextBuffer**() : **String** public function set **TextBuffer**(**String**);

Property Value

System.String.

This property is read/write.

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TopLevelRules Property

Note: This documentation is preliminary and is subject to change.

Gets the collection of rules contained by this instance of the Grammar class.

Definition

Visual Basic	Public ReadOnly Property **TopLevelRules** As **RuleCollection**
C#	public **RuleCollection** **TopLevelRules** { get; }
Managed C++	public: __property **RuleCollection*** get_**TopLevelRules**();
JScript	public function get **TopLevelRules**() : **RuleCollection**

Property Value

System.Speech.Recognition.RuleCollection.

This property is read-only.

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Hypothesis Event

Note: This documentation is preliminary and is subject to change.

Occurs when a spoken phrase is partially recognized.

Definition

Visual Basic	Public Event **Hypothesis** As *RecognitionEventHandler*
C#	public event *RecognitionEventHandler* **Hypothesis**;
Managed C++	public: __event **Hypothesis**;
JScript	In JScript, you can use events, but you cannot define your own.

Remarks

The application may use this event to display intermediate recognition results to the user.

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NoRecognition Event

Note: This documentation is preliminary and is subject to change.

Occurs when a spoken phrase is not recognized.

Definition

Visual Basic	Public Event **NoRecognition** As *RecognitionEventHandler*
C#	public event *RecognitionEventHandler* **NoRecognition**;
Managed C++	public: __event **NoRecognition**;
JScript	In JScript, you can use events, but you cannot define your own.

Remarks

Handle this event to indicate to the user that the spoken phrase was unrecognized. The Result object in the event args will be null.

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Recognition Event

Note: This documentation is preliminary and is subject to change.

Occurs when a spoken phrase is successfully recognized.

Definition

Visual Basic	Public Event **Recognition** As *RecognitionEventHandler*
C#	public event *RecognitionEventHandler* **Recognition**;
Managed C++	public: __event **Recognition**;
JScript	In JScript, you can use events, but you cannot define your own.

Remarks

The audio position and recognition result can be accessed through the RecognitionEventArgs parameter.

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RejectedRecognition Event

Note: This documentation is preliminary and is subject to change.

Occurs when a spoken phrase is recognized with low confidence.

Definition

Visual Basic	Public Event **RejectedRecognition** As *RecognitionEventHandler*
C#	public event *RecognitionEventHandler* **RejectedRecognition**;
Managed C++	public: __event **RejectedRecognition**;
JScript	In JScript, you can use events, but you cannot define your own.

Remarks

The application should confirm the recognition result with the user before processing this event as a successful recognition. The audio position and recognition result can be accessed through the RecognitionEventArgs parameter.

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GrammarCollection Class

Note: This documentation is preliminary and is subject to change.

Represents a collection of Grammar objects.

Definition

Visual Basic	Public Class **GrammarCollection** Inherits *Object* Implements *ICollection*, *IEnumerable*, *IList*
C#	public class **GrammarCollection** : *Object*, ICollection, IEnumerable, IList
Managed C++	public __gc class **GrammarCollection** : public *Object*, ICollection, IEnumerable, IList
JScript	public class **GrammarCollection** extends *Object* implements *IList*, *ICollection*, *IEnumerable*

Members Table

Inheritance Hierarchy

Object Leave

GrammarCollection

Class Information

Namespace	System.Speech.Recognition
Assembly	System.Speech (system.speech.dll)
Strong Name	System.Speech, Version=6.0.4044.0, Culture=neutral, PublicKeyToken=365143bb27e7ac8b

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Add Method

Note: This documentation is preliminary and is subject to change.

Adds a new Grammar with the specified name to the collection.

Overload List

public Grammar Add (String)
public Grammar Add ()
public Grammar Add (Grammar)

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Clear Method

Note: This documentation is preliminary and is subject to change.

Removes all objects from the collection.

Definition

Visual Basic	Public Sub **Clear**()
C#	public **void Clear**();
Managed C++	public: **void Clear**();
JScript	public function **Clear**() : **void**;

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Contains Method

Note: This documentation is preliminary and is subject to change.

Determines whether the collection contains a specific grammar.

Definition

Visual Basic	Public Function **Contains**(_ ByVal *grammar* As **Grammar** _) As **Boolean**
C#	public **bool Contains**(**Grammar** *grammar*);
Managed C++	public: **bool Contains**(**Grammar*** *grammar*);
JScript	public function **Contains**(*grammar* : **Grammar**) : **boolean**;

Parameters

grammar **System.Speech.Recognition.Grammar**. The grammar to locate in the collection.

Return Value

System.Boolean. True if the grammar is found in the collection; otherwise, false.

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CopyTo Method

Note: This documentation is preliminary and is subject to change.

Copies the elements of the collection to an array, starting at the specified index in the array.

Definition

Visual Basic

```
Public Sub CopyTo( _
   ByVal array As Array, _
   ByVal index As Integer _
)
```

C#

```
public void CopyTo(
   Array array,
   int index
);
```

Managed C++

```
public: void CopyTo(
   Array* array,
   int index
);
```

JScript

```
public function CopyTo(
   array : Array,
   index : int
) : void;
```

Parameters

array **System.Array**. The one-dimensional array that is the destination of the elements copied from the collection. The array must have zero-based indexing.

index **System.Int32**. The zero-based index in the array at which copying begins.

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GetEnumerator Method

Note: This documentation is preliminary and is subject to change.

Returns a System.Collections.IEnumerator-implemented object that contains all Grammar objects within the GrammarCollection.

Definition

Visual Basic Public Function **GetEnumerator**() As **IEnumerator**
C# public **IEnumerator GetEnumerator**();
Managed C++ public: **IEnumerator*** **GetEnumerator**();
JScript public function **GetEnumerator**() : **IEnumerator**;

Return Value

System.Collections.IEnumerator.

A System.Collections.IEnumerator-implemented object that contains all Grammar objects within the GrammarCollection.

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IList.Add Method

Note: This documentation is preliminary and is subject to change.

Definition

Visual Basic
```
Private Function IList.Add( _
    ByVal value As Object _
) As Integer
```

C#
```
private int IList.Add(
    object value
);
```

Managed C++
```
private: int IList.Add(
    Object* value
);
```

JScript
```
private function IList.Add(
    value : Object
) : int;
```

Parameters

value **System.Object**.

Return Value

System.Int32.

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IList.Contains Method

Note: This documentation is preliminary and is subject to change.

Definition

Visual Basic
```
Private Function IList.Contains( _
   ByVal value As Object _
) As Boolean
```

C#
```
private bool IList.Contains(
   object value
);
```

Managed C++
```
private: bool IList.Contains(
   Object* value
);
```

JScript
```
private function IList.Contains(
   value : Object
) : boolean;
```

Parameters

value **System.Object**.

Return Value

System.Boolean.

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IList.IndexOf Method

Note: This documentation is preliminary and is subject to change.

Definition

```
Visual Basic
Private Function IList.IndexOf( _
   ByVal value As Object _
) As Integer

C#
private int IList.IndexOf(
   object value
);

Managed C++
private: int IList.IndexOf(
   Object* value
);

JScript
private function IList.IndexOf(
   value : Object
) : int;
```

Parameters

value **System.Object**.

Return Value

System.Int32.

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IList.Insert Method

Note: This documentation is preliminary and is subject to change.

Definition

```
Visual Basic
Private Sub IList.Insert( _
   ByVal index As Integer, _
   ByVal value As Object _
)

C#
private void IList.Insert(
   int index,
   object value
);

Managed C++
private: void IList.Insert(
   int index,
   Object* value
);

JScript
private function IList.Insert(
   index : int,
   value : Object
) : void;
```

Parameters

index **System.Int32.**
value **System.Object.**

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IList.Remove Method

Note: This documentation is preliminary and is subject to change.

Definition

Visual Basic
```
Private Sub IList.Remove( _
   ByVal value As Object _
)
```
C#
```
private void IList.Remove(
   object value
);
```
Managed C++
```
private: void IList.Remove(
   Object* value
);
```
JScript
```
private function IList.Remove(
   value : Object
) : void;
```

Parameters

value **System.Object.**

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IndexOf Method

Note: This documentation is preliminary and is subject to change.

Determines the index of a specific grammar in the collection.

Definition

Visual Basic
```
Public Function IndexOf( _
   ByVal grammar As Grammar _
```

```
) As Integer
```

C#

```
public int IndexOf(
   Grammar grammar
);
```

Managed C++

```
public: int IndexOf(
   Grammar* grammar
);
```

JScript

```
public function IndexOf(
   grammar : Grammar
) : int;
```

Parameters

grammar **System.Speech.Recognition.Grammar**. The grammar to locate in the collection.

Return Value

System.Int32. The index of grammar if found in the collection; otherwise, -1.

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Insert Method

Note: This documentation is preliminary and is subject to change.

Inserts a grammar into the collection at the specified position.

Definition

Visual Basic

```
Public Sub Insert( _
   ByVal index As Integer, _
   ByVal grammar As Grammar _
)
```

C#

```
public void Insert(
   int index,
   Grammar grammar
);
```

Managed C++

```
public: void Insert(
   int index,
   Grammar* grammar
);
```

JScript

```
public function Insert(
   index : int,
   grammar : Grammar
```

```
) : void;
```

Parameters

index	**System.Int32**. The zero-based index at which grammar should be inserted.
grammar	**System.Speech.Recognition.Grammar**. The grammar to insert into the collection.

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Remove Method

Note: This documentation is preliminary and is subject to change.

Removes the first occurrence of the specified grammar from the collection.

Definition

Visual Basic

```
Public Sub Remove( _
    ByVal grammar As Grammar _
)
```

C#

```
public void Remove(
    Grammar grammar
);
```

Managed C++

```
public: void Remove(
    Grammar* grammar
);
```

JScript

```
public function Remove(
    grammar : Grammar
) : void;
```

Parameters

grammar	**System.Speech.Recognition.Grammar**. The grammar to remove from the collection.

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RemoveAt Method

Note: This documentation is preliminary and is subject to change.

Removes the specified item from the collection.

Definition

```
Visual Basic
Public Sub RemoveAt( _
   ByVal index As Integer _
)

C#
public void RemoveAt(
   int index
);

Managed C++
public: void RemoveAt(
   int index
);

JScript
public function RemoveAt(
   index : int
) : void;
```

Parameters

index **System.Int32**. The zero-based index of the item to remove.

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Count Property

Note: This documentation is preliminary and is subject to change.

Gets the number of items in this collection.

Definition

```
Visual Basic  Public ReadOnly Property Count As Integer
C#            public int Count { get; }
Managed C++   public: __property int get_Count();
JScript       public function get Count() : int
```

Property Value

System.Int32.

This property is read-only.

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IsFixedSize Property

Note: This documentation is preliminary and is subject to change.

Gets a value that specifies whether the collection has a fixed size.

Definition

Visual Basic	Public ReadOnly Property **IsFixedSize** As **Boolean**
C#	public **bool** **IsFixedSize** { get; }
Managed C++	public: __property **bool** get_**IsFixedSize**();
JScript	public function get **IsFixedSize**() : **boolean**

Property Value

System.Boolean.

This property is read-only.

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IsReadOnly Property

Note: This documentation is preliminary and is subject to change.

Gets a value that specifies whether the collection is read-only.

Definition

Visual Basic	Public ReadOnly Property **IsReadOnly** As **Boolean**
C#	public **bool** **IsReadOnly** { get; }
Managed C++	public: __property **bool** get_**IsReadOnly**();
JScript	public function get **IsReadOnly**() : **boolean**

Property Value

System.Boolean.

This property is read-only.

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IsSynchronized Property

Note: This documentation is preliminary and is subject to change.

Gets a value indicating whether access to the collection is thread-safe.

Definition

Visual Basic Public ReadOnly Property **IsSynchronized** As **Boolean**

C# public **bool** **IsSynchronized** { get; }

Managed C++ public: __property **bool** get_**IsSynchronized**();

JScript public function get **IsSynchronized**() : **boolean**

Property Value

System.Boolean.

This property is read-only.

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Item Property

Note: This documentation is preliminary and is subject to change.

Gets or sets the Grammar at the specified index.

Definition

Visual Basic

```
Public Property Item( _
    ByVal index As Integer _
) As Grammar
```

C#

```
public Grammar this[
    int index
] { get; set; }
```

Managed C++

```
public: __property Grammar* get_Item(
    int index
);
public: __property void set_Item(
    int index,
    Grammar*
);
```

JScript In JScript, you can use indexed properties, but you cannot define your own.

Property Value

System.Speech.Recognition.Grammar.

This property is read/write.

Parameters

index **System.Int32**.

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SyncRoot Property

Note: This documentation is preliminary and is subject to change.

Gets an object that can be used to synchronize access to the collection.

Definition

Visual Basic	Public ReadOnly Property **SyncRoot** As **Object**
C#	public **object** **SyncRoot** { get; }
Managed C++	public: __property **Object*** get_**SyncRoot**();
JScript	public function get **SyncRoot**() : **Object**

Property Value

System.Object.

This property is read-only.

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InterferenceEventArgs Class

Note: This documentation is preliminary and is subject to change.

Provides data for the Interference event.

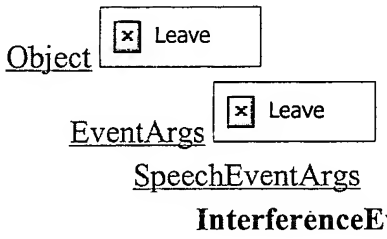
Definition

Visual Basic	Public Class **InterferenceEventArgs** Inherits *SpeechEventArgs*

C#	public class **InterferenceEventArgs** : *SpeechEventArgs*
Managed C++	public __gc class **InterferenceEventArgs** : public *SpeechEventArgs*
JScript	public class **InterferenceEventArgs** extends *SpeechEventArgs*

Members Table

Inheritance Hierarchy



Class Information

Namespace	System.Speech.Recognition
Assembly	System.Speech (system.speech.dll)
Strong Name	System.Speech, Version=6.0.4044.0, Culture=neutral, PublicKeyToken=365143bb27e7ac8b

---

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InterferenceEventArgs Method

Note: This documentation is preliminary and is subject to change.

Initializes a new instance of the InterferenceEventArgs class.

Definition

Visual Basic

```
Public Sub InterferenceEventArgs( _
   ByVal audioPosition As TimeSpan, _
   ByVal interference As InterferenceType _
)
```

C#

```
public InterferenceEventArgs(
   TimeSpan audioPosition,
   InterferenceType interference
);
```

Managed C++

```
public: InterferenceEventArgs(
   TimeSpan audioPosition,
   InterferenceType interference
);
```

```
JScript    public function InterferenceEventArgs(
             audioPosition : TimeSpan,
             interference : InterferenceType
           );
```

Parameters

audioPosition **System.TimeSpan**. Placeholder
interference **System.Speech.Recognition.InterferenceType**. Interference event type.

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Interference Property

Note: This documentation is preliminary and is subject to change.

Gets the interference type.

Definition

```
Visual Basic  Public ReadOnly Property Interference As InterferenceType
C#            public InterferenceType Interference { get; }
Managed C++   public: __property InterferenceType get_Interference();
JScript       public function get Interference() : InterferenceType
```

Property Value

System.Speech.Recognition.InterferenceType.

This property is read-only.

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LocalRecognizer Class

Note: This documentation is preliminary and is subject to change.

This class allows applications to create a private instance of a Recognizer in their own address space.

Definition

```
Public Class LocalRecognizer
```

Visual Basic	Inherits *Object* Implements *IDisposable*, *IRecognizer*
C#	public class **LocalRecognizer** : *Object*, IDisposable, IRecognizer
Managed C++	public __gc class **LocalRecognizer** : public *Object*, IDisposable, IRecognizer
JScript	public class **LocalRecognizer** extends *Object* implements *IRecognizer*, *IDisposable*

Members Table

Inheritance Hierarchy

Object [Leave]

LocalRecognizer

Remarks

Unlike the SystemRecognizer which is shared with other processes on the system, the LocalRecognizer is totally under the control of the process that creates it.

Each instance of the LocalRecognizer class represents a single recognition engine. The application can connect to each recognition engine one or more recognition contexts, from which the application can control the recognition grammars to be used, start and stop recognition, and receive events and recognition results. A standard application may not need to call many of the methods on this class as the default settings are likely satisfactory.

Class Information

Namespace	System.Speech.Recognition
Assembly	System.Speech (system.speech.dll)
Strong Name	System.Speech, Version=6.0.4044.0, Culture=neutral, PublicKeyToken=365143bb27e7ac8b

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AdaptLanguageModel Method

Note: This documentation is preliminary and is subject to change.

Passes a block of text to the recognition engine which can be used to adapt the active language models.

Overload List

public Void AdaptLanguageModel (String)
public Void AdaptLanguageModel (String[])
public Void AdaptLanguageModel (String, String, AdaptationSettings, AdaptationRelevance)
public Void AdaptLanguageModel (String
[], String, AdaptationSettings, AdaptationRelevance)

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CancelRecognizeAsync Method

Note: This documentation is preliminary and is subject to change.

Cancels the currently executing asynchronous operation. If no asynchronous operation is currently executing, nothing happens.

Definition

Visual Basic	Public Sub **CancelRecognizeAsync**()
C#	public **void** **CancelRecognizeAsync**();
Managed C++	public: **void** **CancelRecognizeAsync**();
JScript	public function **CancelRecognizeAsync**() : **void**;

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Dispose Method

Note: This documentation is preliminary and is subject to change.

Releases SAPI resources.

Definition

Visual Basic	Public Sub **Dispose**()
C#	public **void** **Dispose**();
Managed C++	public: **void** **Dispose**();
JScript	public function **Dispose**() : **void**;

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EmulateRecognize Method

Note: This documentation is preliminary and is subject to change.

Simulates a speech recognition event by assuming the specified text was spoken.

Overload List

public Void EmulateRecognize (String)
public Void EmulateRecognize (String, CompareOptions)
public Void EmulateRecognize (String[])
public Void EmulateRecognize (String[], CompareOptions)

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InsertBookmark Method

Note: This documentation is preliminary and is subject to change.

Sets a bookmark at a particular stream position.

Definition

Visual Basic

```
Public Sub InsertBookmark( _
   ByVal streamTimeToDoBookmark As TimeSpan, _
   ByVal tag As Object _
)
```

C#

```
public void InsertBookmark(
   TimeSpan streamTimeToDoBookmark,
   object tag
);
```

Managed C++

```
public: void InsertBookmark(
   TimeSpan streamTimeToDoBookmark,
   Object* tag
);
```

JScript

```
public function InsertBookmark(
   streamTimeToDoBookmark : TimeSpan,
   tag : Object
) : void;
```

Parameters

streamTimeToDoBookmark **System.TimeSpan.**
tag **System.Object.**

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InsertBookmarkAhead Method

Note: This documentation is preliminary and is subject to change.

Sets a bookmark at a particular time ahead of the current audio position.

Definition

Visual Basic

```
Public Sub InsertBookmarkAhead( _
   ByVal timeAheadToDoBookmark As TimeSpan, _
   ByVal tag As Object _
)
```

C#

```
public void InsertBookmarkAhead(
   TimeSpan timeAheadToDoBookmark,
   object tag
);
```

Managed C++

```
public: void InsertBookmarkAhead(
   TimeSpan timeAheadToDoBookmark,
   Object* tag
);
```

JScript

```
public function InsertBookmarkAhead(
   timeAheadToDoBookmark : TimeSpan,
   tag : Object
) : void;
```

Parameters

timeAheadToDoBookmark	**System.TimeSpan**.
tag	**System.Object**.

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LocalRecognizer Method

Note: This documentation is preliminary and is subject to change.

Creates a new default LocalRecognizer.

Overload List

public LocalRecognizer ()

public LocalRecognizer (RecognizerAttributes)
public LocalRecognizer (CultureInfo Class)
public LocalRecognizer (String)

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Recognize Method

Note: This documentation is preliminary and is subject to change.

Begins synchronous recognition, which terminates when a phrase has been recognized or after timeout.

Overload List

public RecognitionResult Recognize ()
public RecognitionResult Recognize (RecognizeMode)

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RecognizeAsync Method

Note: This documentation is preliminary and is subject to change.

Begins asynchronous recognition. Calling RecognizeAsync() while a previous RecognizeAsync() is still executing will block until the previous operation completes.

Overload List

public Void RecognizeAsync ()
public Void RecognizeAsync (RecognizeMode)

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RequestUpdate Method

Note: This documentation is preliminary and is subject to change.

Requests an update as soon as the engine can accept it. The system will fire the Update event once the recognizer is ready to receive updates.

Overload List

public Void RequestUpdate ()
public Void RequestUpdate (Object)
public Void RequestUpdate (TimeSpan, Object)

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RequestUpdateAhead Method

Note: This documentation is preliminary and is subject to change.

Requests an update as soon as the engine can accept it. The system will fire the Update event once the recognizer is ready to receive updates.

Definition

Visual Basic

```
Public Sub RequestUpdateAhead( _
   ByVal timeAheadToDoUpdate As TimeSpan, _
   ByVal tag As Object _
)
```

C#

```
public void RequestUpdateAhead(
   TimeSpan timeAheadToDoUpdate,
   object tag
);
```

Managed C++

```
public: void RequestUpdateAhead(
   TimeSpan timeAheadToDoUpdate,
   Object* tag
);
```

JScript

```
public function RequestUpdateAhead(
   timeAheadToDoUpdate : TimeSpan,
   tag : Object
) : void;
```

Parameters

timeAheadToDoUpdate	**System.TimeSpan**.
tag	**System.Object**.

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StopRecognizeAsync Method

Note: This documentation is preliminary and is subject to change.

Stops the asynchronous recognition operation for Single and Multiple recognition modes.

Definition

Visual Basic	Public Sub **StopRecognizeAsync**()
C#	public **void StopRecognizeAsync**();
Managed C++	public: **void StopRecognizeAsync**();
JScript	public function **StopRecognizeAsync**() : **void**;

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WaitForUpdate Method

Note: This documentation is preliminary and is subject to change.

Waits until the engine is ready to perform an update. The system will fire the Update event once the recognizer is ready to receive updates. This call will block until after this event is processed.

Definition

Visual Basic	Public Sub **WaitForUpdate**()
C#	public **void WaitForUpdate**();
Managed C++	public: **void WaitForUpdate**();
JScript	public function **WaitForUpdate**() : **void**;

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Attributes Property

Note: This documentation is preliminary and is subject to change.

Gets the attributes of the recognizer.

Definition

Visual Basic	Public ReadOnly Property **Attributes** As **RecognizerAttributes**
C#	public **RecognizerAttributes Attributes** { get; }
Managed C++	public: __property **RecognizerAttributes*** get_**Attributes**();
JScript	public function get **Attributes**() : **RecognizerAttributes**

Property Value

System.Speech.Recognition.RecognizerAttributes.

This property is read-only.

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AudioContent Property

Note: This documentation is preliminary and is subject to change.

Gets the audio input received by the recognizer.

Definition

Visual Basic	Public ReadOnly Property **AudioContent** As **AudioContent**
C#	public **AudioContent** **AudioContent** { get; }
Managed C++	public: __property **AudioContent** get_**AudioContent**();
JScript	public function get **AudioContent**() : **AudioContent**

Property Value

System.Speech.Recognition.AudioContent.

This property is read-only.

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AvailableRecognizers Property

Note: This documentation is preliminary and is subject to change.

Gets the attributes of all the recognizers that are installed on the system

Definition

Visual Basic	Public Shared ReadOnly Property **AvailableRecognizers** As **Recognizers**
C#	public static **Recognizers** **AvailableRecognizers** { get; }
Managed C++	public: __property static **Recognizers*** get_**AvailableRecognizers**();
JScript	public static function get **AvailableRecognizers**() : **Recognizers**

Property Value

System.Speech.Recognition.Recognizers.

This property is read-only.

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BabbleTimeout Property

Note: This documentation is preliminary and is subject to change.

Specifies the maximum time that is allowed for an utterance or recording.

Definition

Visual Basic	Public Property **BabbleTimeout** As **TimeSpan**
C#	public **TimeSpan BabbleTimeout** { get; set; }
Managed C++	public: __property **TimeSpan** get_**BabbleTimeout**(); public: __property void set_**BabbleTimeout**(**TimeSpan**);
JScript	public function get **BabbleTimeout**() : **TimeSpan** public function set **BabbleTimeout**(**TimeSpan**);

Property Value

System.TimeSpan.

This property is read/write.

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EnableRejection Property

Note: This documentation is preliminary and is subject to change.

Gets or sets a value that specifies whether the Recognizer splits Recognitions into those that it is confident are correct (Recognition events), and those it is not (RejectedRecognition events). Otherwise all recognitions raise Recognition events. By default this is set to true.

Definition

Visual Basic	Public Property **EnableRejection** As **Boolean**
C#	public **bool EnableRejection** { get; set; }

Managed C++	public: __property **bool** get_**EnableRejection**(); public: __property void set_**EnableRejection**(**bool**);
JScript	public function get **EnableRejection**() : **boolean** public function set **EnableRejection**(**boolean**);

Property Value

System.Boolean.

This property is read/write.

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Grammars Property

Note: This documentation is preliminary and is subject to change.

Gets the collection of available grammars.

Definition

Visual Basic	Public ReadOnly Property **Grammars** As **GrammarCollection**
C#	public **GrammarCollection** **Grammars** { get; }
Managed C++	public: __property **GrammarCollection*** get_**Grammars**();
JScript	public function get **Grammars**() : **GrammarCollection**

Property Value

System.Speech.Recognition.GrammarCollection.

This property is read-only.

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InitialSilenceTimeout Property

Note: This documentation is preliminary and is subject to change.

Gets or sets the time the recognizer allows between when the microphone is turned on, and recognition starts.

Definition

Visual Basic	Public Property **InitialSilenceTimeout** As **TimeSpan**
C#	public **TimeSpan** **InitialSilenceTimeout** { get; set; }
Managed C++	public: __property **TimeSpan** get_**InitialSilenceTimeout**(); public: __property void set_**InitialSilenceTimeout**(**TimeSpan**);
JScript	public function get **InitialSilenceTimeout**() : **TimeSpan** public function set **InitialSilenceTimeout**(**TimeSpan**);

Property Value

System.TimeSpan.

This property is read/write.

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IsActive Property

Note: This documentation is preliminary and is subject to change.

Gets or sets a value that specifies whether to activate and deactivate a set of grammars simultaneously when using a shared recognizer.

Definition

Visual Basic	Public Property **IsActive** As **Boolean**
C#	public **bool** **IsActive** { get; set; }
Managed C++	public: __property **bool** get_**IsActive**(); public: __property void set_**IsActive**(**bool**);
JScript	public function get **IsActive**() : **boolean** public function set **IsActive**(**boolean**);

Property Value

System.Boolean.

This property is read/write.

Remarks

For a top-level rule to be recognized, it must be active, it must be housed in an active grammar, and that grammar must be housed in a recognizer that is active. If any one of these three conditions are not met, the rule cannot be recognized. Setting this method is used in the shared case to activate and deactivate a set of grammars simultaneously.

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Properties Property

Note: This documentation is preliminary and is subject to change.

Gets the properties of the recognizer.

Definition

Visual Basic	Public ReadOnly Property **Properties** As **RecognizerProperties**
C#	public **RecognizerProperties** **Properties** { get; }
Managed C++	public: __property **RecognizerProperties*** get_**Properties**();
JScript	public function get **Properties**() : **RecognizerProperties**

Property Value

System.Speech.Recognition.RecognizerProperties.

This property is read-only.

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State Property

Note: This documentation is preliminary and is subject to change.

Gets the current state of the recognizer.

Definition

Visual Basic	Public ReadOnly Property **State** As **RecognizerState**
C#	public **RecognizerState** **State** { get; }
Managed C++	public: __property **RecognizerState** get_**State**();
JScript	public function get **State**() : **RecognizerState**

Property Value

System.Speech.Recognition.RecognizerState.

This property is read-only.

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AudioContentChanged Event

Note: This documentation is preliminary and is subject to change.

Occurs when the type of signal in the audio input changed.

Definition

Visual Basic	Public Event **AudioContentChanged** As *AudioContentChangedEventHandler*
C#	public event *AudioContentChangedEventHandler* **AudioContentChanged;**
Managed C++	public: __event **AudioContentChanged;**
JScript	In JScript, you can use events, but you cannot define your own.

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Bookmark Event

Note: This documentation is preliminary and is subject to change.

Occurs when a bookmark is reached.

Definition

Visual Basic	Public Event **Bookmark** As *BookmarkEventHandler*
C#	public event *BookmarkEventHandler* **Bookmark;**
Managed C++	public: __event **Bookmark;**
JScript	In JScript, you can use events, but you cannot define your own.

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Hypothesis Event

Note: This documentation is preliminary and is subject to change.

Occurs when a spoken phrase is partially recognized.

Definition

Visual Basic	Public Event **Hypothesis** As *RecognitionEventHandler*
C#	public event *RecognitionEventHandler* **Hypothesis**;
Managed C++	public: __event **Hypothesis**;
JScript	In JScript, you can use events, but you cannot define your own.

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InterferenceDetected Event

Note: This documentation is preliminary and is subject to change.

Occurs when the speech recognition engine encounters interference in the input audio stream.

Definition

Visual Basic	Public Event **InterferenceDetected** As *InterferenceEventHandler*
C#	public event *InterferenceEventHandler* **InterferenceDetected**;
Managed C++	public: __event **InterferenceDetected**;
JScript	In JScript, you can use events, but you cannot define your own.

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NoRecognition Event

Note: This documentation is preliminary and is subject to change.

Occurs when a spoken phrase is not recognized.

Definition

Visual Basic	Public Event **NoRecognition** As *RecognitionEventHandler*
C#	public event *RecognitionEventHandler* **NoRecognition**;
Managed C++	public: __event **NoRecognition**;
JScript	In JScript, you can use events, but you cannot define your own.

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Recognition Event

Note: This documentation is preliminary and is subject to change.

Occurs when a spoken phrase is successfully recognized.

Definition

Visual Basic	Public Event **Recognition** As *RecognitionEventHandler*
C#	public event *RecognitionEventHandler* **Recognition**;
Managed C++	public: __event **Recognition**;
JScript	In JScript, you can use events, but you cannot define your own.

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RecognizeCompleted Event

Note: This documentation is preliminary and is subject to change.

Occurs when recognition is complete.

Definition

Visual Basic	Public Event **RecognizeCompleted** As *RecognizeCompletedEventHandler*
C#	public event *RecognizeCompletedEventHandler* **RecognizeCompleted**;
Managed C++	public: __event **RecognizeCompleted**;
JScript	In JScript, you can use events, but you cannot define your own.

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RecognizeProgressChanged Event

Note: This documentation is preliminary and is subject to change.

Occurs when recognition progress is made.

Definition

Visual Basic	Public Event **RecognizeProgressChanged** As *RecognizeProgressChangedEventHandler*
C#	public event *RecognizeProgressChangedEventHandler* **RecognizeProgressChanged**;
Managed	

C++	public: __event **RecognizeProgressChanged**;
JScript	In JScript, you can use events, but you cannot define your own.

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RecognizerStateChanged Event

Note: This documentation is preliminary and is subject to change.

Occurs when recognition starts, or stops; or when recognition is canceled, paused, or resumed.

Definition

Visual Basic	Public Event **RecognizerStateChanged** As *RecognizerStateChangedEventHandler*
C#	public event *RecognizerStateChangedEventHandler* **RecognizerStateChanged**;
Managed C++	public: __event **RecognizerStateChanged**;
JScript	In JScript, you can use events, but you cannot define your own.

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RejectedRecognition Event

Note: This documentation is preliminary and is subject to change.

Occurs when a spoken phrase is recognized with low confidence.

Definition

Visual Basic	Public Event **RejectedRecognition** As *RecognitionEventHandler*
C#	public event *RecognitionEventHandler* **RejectedRecognition**;
Managed C++	public: __event **RejectedRecognition**;
JScript	In JScript, you can use events, but you cannot define your own.

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Update Event

Note: This documentation is preliminary and is subject to change.

Occurs when the Update button is clicked.

Definition

Visual Basic	Public Event **Update** As *UpdateEventHandler*
C#	public event *UpdateEventHandler* **Update**;
Managed C++	public: __event **Update**;
JScript	In JScript, you can use events, but you cannot define your own.

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RecognitionAudio Class

Note: This documentation is preliminary and is subject to change.

Contains the audio data and methods for a specific RecognitionResult or a portion of a RecognitionResult.

Definition

Visual Basic	Public Class **RecognitionAudio** Inherits *Object*
C#	public class **RecognitionAudio** : *Object*
Managed C++	public __gc class **RecognitionAudio** : public *Object*
JScript	public class **RecognitionAudio** extends *Object*

Members Table

Inheritance Hierarchy

Object [Leave]

RecognitionAudio

Class Information

Namespace	System.Speech.Recognition
Assembly	System.Speech (system.speech.dll)
Strong Name	System.Speech, Version=6.0.4044.0, Culture=neutral, PublicKeyToken=365143bb27e7ac8b

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GetAudio Method

Note: This documentation is preliminary and is subject to change.

Gets all the audio associated with this instance of RecognitionAudio.

Overload List

public Void GetAudio (Stream)
public Void GetAudio (Stream, TimeSpan, TimeSpan)
public Void GetAudio (Stream, Int32, Int32)

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AudioLength Property

Note: This documentation is preliminary and is subject to change.

Gets the length of the audio data.

Definition

Visual Basic	Public ReadOnly Property **AudioLength** As **TimeSpan**
C#	public **TimeSpan** **AudioLength** { get; }
Managed C++	public: __property **TimeSpan** get_**AudioLength**();
JScript	public function get **AudioLength**() : **TimeSpan**

Property Value

System.TimeSpan.

This property is read-only.

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AudioPosition Property

Note: This documentation is preliminary and is subject to change.

Gets the start point of the audio data, relative to the start of the stream.

Definition

Visual Basic	Public ReadOnly Property **AudioPosition** As **TimeSpan**
C#	public **TimeSpan AudioPosition** { get; }
Managed C++	public: __property **TimeSpan** get_**AudioPosition**();
JScript	public function get **AudioPosition**() : **TimeSpan**

Property Value

System.TimeSpan.

This property is read-only.

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RecognitionEventArgs Class

Note: This documentation is preliminary and is subject to change.

Provides data for the Recognition, RejectedRecognition, and Hypothesis events.

Definition

Visual Basic	Public Class **RecognitionEventArgs** Inherits *SpeechEventArgs*
C#	public class **RecognitionEventArgs** : *SpeechEventArgs*
Managed C++	public __gc class **RecognitionEventArgs** : public *SpeechEventArgs*
JScript	public class **RecognitionEventArgs** extends *SpeechEventArgs*

Members Table

Inheritance Hierarchy

Object
EventArgs
SpeechEventArgs
RecognitionEventArgs

Class Information

Namespace	System.Speech.Recognition
Assembly	System.Speech (system.speech.dll)
Strong Name	System.Speech, Version=6.0.4044.0, Culture=neutral, PublicKeyToken=365143bb27e7ac8b

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RecognitionEventArgs Method

Note: This documentation is preliminary and is subject to change.

Initializes a new instance of the RecognitionEventArgs class.

Definition

Visual Basic

```
Public Sub RecognitionEventArgs( _
   ByVal audioPosition As TimeSpan, _
   ByVal result As RecognitionResult, _
   ByVal resultType As ResultType _
)
```

C#

```
public RecognitionEventArgs(
   TimeSpan audioPosition,
   RecognitionResult result,
   ResultType resultType
);
```

Managed C++

```
public: RecognitionEventArgs(
   TimeSpan audioPosition,
   RecognitionResult* result,
   ResultType resultType
);
```

JScript

```
public function RecognitionEventArgs(
   audioPosition : TimeSpan,
   result : RecognitionResult,
   resultType : ResultType
);
```

Parameters

audioPosition	**System.TimeSpan**. Placeholder
result	**System.Speech.Recognition.RecognitionResult**. Result representing the recognized phrase.
resultType	**System.Speech.Recognition.ResultType**. Type of result.

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Result Property

Note: This documentation is preliminary and is subject to change.

Gets the result of a recognition.

Definition

Visual Basic	Public ReadOnly Property **Result** As **RecognitionResult**
C#	public **RecognitionResult** **Result** { get; }
Managed C++	public: __property **RecognitionResult*** get_**Result**();
JScript	public function get **Result**() : **RecognitionResult**

Property Value

System.Speech.Recognition.RecognitionResult.

This property is read-only.

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ResultType Property

Note: This documentation is preliminary and is subject to change.

Gets the type of recognition result.

Definition

Visual Basic	Public ReadOnly Property **ResultType** As **ResultType**
C#	public **ResultType** **ResultType** { get; }
Managed C++	public: __property **ResultType** get_**ResultType**();
JScript	public function get **ResultType**() : **ResultType**

Property Value

System.Speech.Recognition.ResultType.

This property is read-only.

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RecognitionPhrase Class

Note: This documentation is preliminary and is subject to change.

Represents the phrase that was recognized by the recognizer.

Definition

Visual Basic	Public Class **RecognitionPhrase** Inherits *Object* Implements *IDisposable*
C#	public class **RecognitionPhrase** : *Object*, IDisposable
Managed C++	public __gc class **RecognitionPhrase** : public *Object*, IDisposable
JScript	public class **RecognitionPhrase** extends *Object* implements *IDisposable*

Members Table

Inheritance Hierarchy

Object [Leave]

RecognitionPhrase

RecognitionPhraseAlternate

RecognitionResult

Class Information

Namespace	System.Speech.Recognition
Assembly	System.Speech (system.speech.dll)
Strong Name	System.Speech, Version=6.0.4044.0, Culture=neutral, PublicKeyToken=365143bb27e7ac8b

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Dispose Method

Note: This documentation is preliminary and is subject to change.

Releases SAPI resources.

Overload List

public Void Dispose ()
public Void Dispose (Boolean)

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Finalize Method

Note: This documentation is preliminary and is subject to change.

Destructor.

Definition

Visual Basic	Overrides Protected Sub **Finalize**()
C#	**~RecognitionPhrase**();
Managed C++	**~RecognitionPhrase**();
JScript	protected override function **Finalize**() : **void**;

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Audio Property

Note: This documentation is preliminary and is subject to change.

Gets the audio for this phrase.

Definition

Visual Basic	Public ReadOnly Property **Audio** As **RecognitionAudio**
C#	public **RecognitionAudio** **Audio** { get; }
Managed C++	public: __property **RecognitionAudio*** get_**Audio**();
JScript	public function get **Audio**() : **RecognitionAudio**

Property Value

System.Speech.Recognition.RecognitionAudio.

This property is read-only.

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Confidence Property

Note: This documentation is preliminary and is subject to change.

Gets the confidence score information included in recognition results.

Definition

Visual Basic	Public ReadOnly Property **Confidence** As **Confidence**
C#	public **Confidence** **Confidence** { get; }
Managed C++	public: __property **Confidence** get_**Confidence**();
JScript	public function get **Confidence**() : **Confidence**

Property Value

System.Speech.Recognition.Confidence.

This property is read-only.

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EnginePrivateData Property

Note: This documentation is preliminary and is subject to change.

Gets an array of additional engine-specific data returned by the recognition engine.

Definition

Visual Basic	Public ReadOnly Property **EnginePrivateData** As **Byte**()
C#	public **byte**[] **EnginePrivateData** { get; }
Managed C++	public: __property **Byte** get_**EnginePrivateData**();
JScript	public function get **EnginePrivateData**() : **byte**[]

Property Value

System.Byte.

This property is read-only.

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Grammar Property

Note: This documentation is preliminary and is subject to change.

Gets the grammar that contained the rule that produced this result.

Definition

Visual Basic	Public ReadOnly Property **Grammar** As **Grammar**
C#	public **Grammar** **Grammar** { get; }
Managed C++	public: __property **Grammar*** get_**Grammar**();
JScript	public function get **Grammar**() : **Grammar**

Property Value

System.Speech.Recognition.Grammar.

This property is read-only.

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Language Property

Note: This documentation is preliminary and is subject to change.

Gets the language ID for the current CultureInfo.

Definition

Visual Basic	Public ReadOnly Property **Language** As **CultureInfo Class**
C#	public **CultureInfo Class** **Language** { get; }
Managed C++	public: __property **CultureInfo Class*** get_**Language**();
JScript	public function get **Language**() : **CultureInfo Class**

Property Value

System.Globalization.CultureInfo.

This property is read-only.

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Properties Property

Note: This documentation is preliminary and is subject to change.

Gets the collection of semantic properties associated with this RecognitionPhrase.

Definition

Visual Basic	Public ReadOnly Property **Properties** As **SemanticPropertyCollection**
C#	public **SemanticPropertyCollection** **Properties** { get; }
Managed C++	public: __property **SemanticPropertyCollection*** get_**Properties**();
JScript	public function get **Properties**() : **SemanticPropertyCollection**

Property Value

System.Speech.Recognition.SemanticPropertyCollection.

This property is read-only.

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RecognizerConfidence Property

Note: This documentation is preliminary and is subject to change.

Gets the confidence score information included in recognition results.

Definition

Visual Basic	Public ReadOnly Property **RecognizerConfidence** As **Single**
C#	public **float** **RecognizerConfidence** { get; }
Managed C++	public: __property **float** get_**RecognizerConfidence**();
JScript	public function get **RecognizerConfidence**() : **float**

Property Value

System.Single.

This property is read-only.

Remarks

This value is not standardized across multiple speech recognizers, and may change from version to version of a specific recognizer.

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Rule Property

Note: This documentation is preliminary and is subject to change.

Gets the rule that allowed this result to be recognized, and the rule's parse tree.

Definition

Visual Basic	Public ReadOnly Property **Rule** As **RecognitionRule**
C#	public **RecognitionRule** **Rule** { get; }
Managed C++	public: __property **RecognitionRule*** get_**Rule**();
JScript	public function get **Rule**() : **RecognitionRule**

Property Value

System.Speech.Recognition.RecognitionRule.

This property is read-only.

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Sml Property

Note: This documentation is preliminary and is subject to change.

Returns the XML that represents the semantic properties, in SML form.

Definition

Visual Basic	Public ReadOnly Property **Sml** As **String**
C#	public **string** **Sml** { get; }
Managed C++	public: __property **String*** get_**Sml**();
JScript	public function get **Sml**() : **String**

Property Value

System.String.

This property is read-only.

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SpokenText Property

Note: This documentation is preliminary and is subject to change.

Gets the spoken text for this phrase.

Definition

Visual Basic	Public ReadOnly Property **SpokenText** As **String**
C#	public **string SpokenText** { get; }
Managed C++	public: __property **String*** get_**SpokenText**();
JScript	public function get **SpokenText**() : **String**

Property Value

System.String.

This property is read-only.

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SpokenTokens Property

Note: This documentation is preliminary and is subject to change.

Gets the collection of tokens that make up this RecognitionPhrase.

Definition

Visual Basic	Public ReadOnly Property **SpokenTokens** As **SpokenTokenCollection**
C#	public **SpokenTokenCollection SpokenTokens** { get; }
Managed C++	public: __property **SpokenTokenCollection*** get_**SpokenTokens**();
JScript	public function get **SpokenTokens**() : **SpokenTokenCollection**

Property Value

System.Speech.Recognition.SpokenTokenCollection.

This property is read-only.

Remarks

There are two forms of the recognition result, available as the SpokenTokens property and the Tokens property. The SpokenTokens property represents the lexical words that were recognized, and allows access to attributes like lexical text, pronunciation, and confidence score. The Tokens property represents the text of the recognized words and allows access to the display text and leading and trailing space information.

For example, the speech "there are thirteen donuts in a baker's dozen period" will result in "there are thirteen donuts in a baker's dozen period" for the SpokenTokens property, and "There are 13 donuts in a baker's dozen." for the Tokens property.

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Text Property

Note: This documentation is preliminary and is subject to change.

Gets the written text for this phrase.

Definition

Visual Basic	Public ReadOnly Property **Text** As **String**
C#	public **string Text** { get; }
Managed C++	public: __property **String*** get_**Text**();
JScript	public function get **Text**() : **String**

Property Value

System.String.

This property is read-only.

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Tokens Property

Note: This documentation is preliminary and is subject to change.

Gets the collection of tokens that make up this RecognitionPhrase.

Definition

Visual Basic	Public ReadOnly Property **Tokens** As **DisplayTokenCollection**
C#	public **DisplayTokenCollection** **Tokens** { get; }
Managed C++	public: __property **DisplayTokenCollection*** get_**Tokens**();
JScript	public function get **Tokens**() : **DisplayTokenCollection**

Property Value

System.Speech.Recognition.DisplayTokenCollection.

This property is read-only.

Remarks

There are two forms of the recognition result, available as the SpokenTokens property and the Tokens property. The SpokenTokens property represents the lexical words that were recognized, and allows access to attributes like lexical text, pronunciation, and confidence score. The Tokens property represents the text of the recognized words and allows access to the display text and leading and trailing space information.

For example, the speech "there are thirteen donuts in a baker's dozen period" will result in "there are thirteen donuts in a baker's dozen period" for the SpokenTokens property, and "There are 13 donuts in a baker's dozen." for the Tokens property.

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RecognitionPhraseAlternate Class

Note: This documentation is preliminary and is subject to change.

Contains information about an alternate recognition by the speech recognizer.

Definition

Visual Basic	Public Class **RecognitionPhraseAlternate** Inherits *RecognitionPhrase*
C#	public class **RecognitionPhraseAlternate** : *RecognitionPhrase*
Managed C++	public __gc class **RecognitionPhraseAlternate** : public *RecognitionPhrase*
JScript	public class **RecognitionPhraseAlternate** extends *RecognitionPhrase*

Members Table

Inheritance Hierarchy

Object Leave

RecognitionPhrase

RecognitionPhraseAlternate

Class Information

Namespace	System.Speech.Recognition
Assembly	System.Speech (system.speech.dll)
Strong Name	System.Speech, Version=6.0.4044.0, Culture=neutral, PublicKeyToken=365143bb27e7ac8b

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Dispose Method

Note: This documentation is preliminary and is subject to change.

Definition

Visual Basic
```
Overrides Protected Sub Dispose( _
   ByVal disposing As Boolean _
)
```

C#
```
protected override void Dispose(
   bool disposing
);
```

Managed C++
```
protected: void Dispose(
   bool disposing
);
```

JScript
```
protected override function Dispose(
   disposing : boolean
) : void;
```

Parameters

disposing **System.Boolean**.

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AlternateSpokenText Property

Note: This documentation is preliminary and is subject to change.

Gets the text of an alternate recognition result representing an actual spoken word unit, including lexical text, pronunciation, and confidence score.

Definition

Visual Basic	Public ReadOnly Property **AlternateSpokenText** As **String**
C#	public **string AlternateSpokenText** { get; }
Managed C++	public: __property **String*** get_**AlternateSpokenText**();
JScript	public function get **AlternateSpokenText**() : **String**

Property Value

System.String.

This property is read-only.

Remarks

This alternative text does not include the text that was the same as in the original result, either at the beginning, or at the end. The Text property contains full text for this alternative, including the text that was the same as in the original result, at the beginning and at the end

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AlternateSpokenTokens Property

Note: This documentation is preliminary and is subject to change.

Gets the collection of tokens representing actual spoken word units not present at the beginning or the end of the original result.

Definition

Visual Basic	Public ReadOnly Property **AlternateSpokenTokens** As **SpokenTokenCollection**
C#	public **SpokenTokenCollection AlternateSpokenTokens** { get; }
Managed C++	public: __property **SpokenTokenCollection*** get_**AlternateSpokenTokens**();
JScript	public function get **AlternateSpokenTokens**() : **SpokenTokenCollection**

Property Value

System.Speech.Recognition.SpokenTokenCollection.

This property is read-only.

Remarks

This alternative collection of tokens does not include the tokens that were the same as in the original result, either at the beginning, or at the end. The Tokens property contains full collection of tokens for this alternative, including the tokens that were the same as in the original collection of tokens, at the beginning and at the end

---

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AlternateText Property

Note: This documentation is preliminary and is subject to change.

Gets the normalized form of an alternate recognition result, including display text and normalized text, and white-space information.

Definition

Visual Basic	Public ReadOnly Property **AlternateText** As **String**
C#	public **string AlternateText** { get; }
Managed C++	public: __property **String*** get_**AlternateText**();
JScript	public function get **AlternateText**() : **String**

Property Value

System.String.

This property is read-only.

Remarks

This alternative text does not include the text that was the same as in the original result, either at the beginning, or at the end. The Text property contains full text for this alternative, including the text that was the same as in the original result, at the beginning and at the end

---

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AlternateTokens Property

Note: This documentation is preliminary and is subject to change.

Gets the collection of tokens representing the alternate normalized form of an alternate recognition result, not present at the beginning or the end of the original result.

Definition

Visual Basic	Public ReadOnly Property **AlternateTokens** As **DisplayTokenCollection**
C#	public **DisplayTokenCollection** **AlternateTokens** { get; }
Managed C++	public: __property **DisplayTokenCollection*** get_**AlternateTokens**();
JScript	public function get **AlternateTokens**() : **DisplayTokenCollection**

Property Value

System.Speech.Recognition.DisplayTokenCollection.

This property is read-only.

Remarks

This alternative collection of tokens does not include the tokens that were the same as in the original result, either at the beginning, or at the end. The Tokens property contains full collection of tokens for this alternative, including the tokens that were the same as in the original collection of tokens, at the beginning and at the end

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OriginalSpokenText Property

Note: This documentation is preliminary and is subject to change.

Gets the text representing an actual spoken word unit, including lexical text, pronunciation, and confidence score, in the original recognition result that is replaced by the alternate.

Definition

Visual Basic	Public ReadOnly Property **OriginalSpokenText** As **String**
C#	public **string** **OriginalSpokenText** { get; }
Managed C++	public: __property **String*** get_**OriginalSpokenText**();
JScript	public function get **OriginalSpokenText**() : **String**

Property Value

System.String.

This property is read-only.

Remarks

This original text does not include the text that was the same as in the alternative, either at the beginning, or at the end. The Text property on the result object contains full text for the original phrase, including the text that was the same as in the alternative, at the beginning and at the end

---

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OriginalSpokenTokens Property

Note: This documentation is preliminary and is subject to change.

Gets the collection of tokens representing actual spoken words that this alternate replaces.

Definition

Visual Basic	Public ReadOnly Property **OriginalSpokenTokens** As SpokenTokenCollection
C#	public SpokenTokenCollection **OriginalSpokenTokens** { get; }
Managed C++	public: __property SpokenTokenCollection* get_**OriginalSpokenTokens**();
JScript	public function get **OriginalSpokenTokens**() : SpokenTokenCollection

Property Value

System.Speech.Recognition.SpokenTokenCollection.

This property is read-only.

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OriginalText Property

Note: This documentation is preliminary and is subject to change.

Gets the normalized form of the text that this alternative replaces in the original result.

Definition

Visual Basic	Public ReadOnly Property **OriginalText** As String
C#	public string **OriginalText** { get; }
Managed C++	public: __property String* get_**OriginalText**();

JScript public function get **OriginalText**() : **String**

Property Value

System.String.

This property is read-only.

Remarks

This original text does not include the text that was the same as in the alternative, either at the beginning, or at the end. The Text property on the result object contains full text for the original phrase, including the text that was the same as in the alternative, at the beginning and at the end

---

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OriginalTokens Property

Note: This documentation is preliminary and is subject to change.

Gets the collection of tokens representing the normalized form of the recognition that this alternate replaces.

Definition

Visual Basic Public ReadOnly Property **OriginalTokens** As **DisplayTokenCollection**
C# public **DisplayTokenCollection** **OriginalTokens** { get; }
Managed C++ public: __property **DisplayTokenCollection*** get_**OriginalTokens**();
JScript public function get **OriginalTokens**() : **DisplayTokenCollection**

Property Value

System.Speech.Recognition.DisplayTokenCollection.

This property is read-only.

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RecognitionPhraseAlternateCollection Class

Note: This documentation is preliminary and is subject to change.

A collection of alternatives for a specific result.

Definition

Visual Basic	Public Class **RecognitionPhraseAlternateCollection** Inherits *ReadOnlyCollectionBase*
C#	public class **RecognitionPhraseAlternateCollection** : *ReadOnlyCollectionBase*
Managed C++	public __gc class **RecognitionPhraseAlternateCollection** : public *ReadOnlyCollectionBase*
JScript	public class **RecognitionPhraseAlternateCollection** extends *ReadOnlyCollectionBase*

Members Table

Inheritance Hierarchy

Object [Leave]

ReadOnlyCollectionBase [Leave]

RecognitionPhraseAlternateCollection

Class Information

Namespace	System.Speech.Recognition
Assembly	System.Speech (system.speech.dll)
Strong Name	System.Speech, Version=6.0.4044.0, Culture=neutral, PublicKeyToken=365143bb27e7ac8b

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Item Property

Note: This documentation is preliminary and is subject to change.

Gets a specific alternative from the collection.

Definition

Visual Basic

```
Public ReadOnly Property Item( _
    ByVal index As Integer _
) As RecognitionPhraseAlternate
```

C#

```
public RecognitionPhraseAlternate this[
    int index
] { get; }
public: __property RecognitionPhraseAlternate* get_Item(
```

Managed C++ **int** *index*
);

JScript In JScript, you can use indexed properties, but you cannot define your own.

Property Value

System.Speech.Recognition.RecognitionPhraseAlternate.

This property is read-only.

Parameters

index **System.Int32**.

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RecognitionResult Class

Note: This documentation is preliminary and is subject to change.

Represents the result when a speech recognizer processes audio and attempts to recognize user speech.

Definition

Visual Basic Public Class **RecognitionResult**
Inherits *RecognitionPhrase*

C# public class **RecognitionResult** : *RecognitionPhrase*

Managed C++ public __gc class **RecognitionResult** : public *RecognitionPhrase*

JScript public class **RecognitionResult** extends *RecognitionPhrase*

Members Table

Inheritance Hierarchy

Object Leave
RecognitionPhrase
RecognitionResult

Class Information

Namespace System.Speech.Recognition
Assembly System.Speech (system.speech.dll)

Strong System.Speech, Version=6.0.4044.0, Culture=neutral,

Name PublicKeyToken=365143bb27e7ac8b

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Dispose Method

Note: This documentation is preliminary and is subject to change.

Definition

Visual Basic

```
Overrides Protected Sub Dispose( _
   ByVal disposing As Boolean _
)
```

C#

```
protected override void Dispose(
   bool disposing
);
```

Managed C++

```
protected: void Dispose(
   bool disposing
);
```

JScript

```
protected override function Dispose(
   disposing : boolean
) : void;
```

Parameters

disposing **System.Boolean**.

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GetSmlAlternates Method

Note: This documentation is preliminary and is subject to change.

Gets the XML that represents the semantic properties in SML form.

Definition

Visual Basic

```
Public Function GetSmlAlternates( _
   ByVal numberOfAlternates As Integer _
) As String
```

C#

```
public string GetSmlAlternates(
   int numberOfAlternates
```

```
                );
                public: String* GetSmlAlternates(
Managed C++       int numberOfAlternates
                );
                public function GetSmlAlternates(
JScript           numberOfAlternates : int
                ) : String;
```

Parameters

numberOfAlternates **System.Int32**.

Return Value

System.String.

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PerformCorrection Method

Note: This documentation is preliminary and is subject to change.

Specifies that the alternate recognition should replace the recognition selected by the speech recognition (SR) engine, thus indicating to the speech recognizer that it can learn from this overriding choice by the end user.

Overload List

public RecognitionResult PerformCorrection (RecognitionPhraseAlternate)
public Void PerformCorrection (Int32, Int32, String)

Remarks

Not all speech recognizers learn from this information.

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Alternates Property

Note: This documentation is preliminary and is subject to change.

Gets a collection of alternate phrases.

Definition

Visual Basic	Public ReadOnly Property **Alternates** As **RecognitionPhraseAlternateCollection**
C#	public **RecognitionPhraseAlternateCollection** **Alternates** { get; }
Managed C++	public: __property **RecognitionPhraseAlternateCollection*** get_**Alternates**();
JScript	public function get **Alternates**() : **RecognitionPhraseAlternateCollection**

Property Value

System.Speech.Recognition.RecognitionPhraseAlternateCollection.

This property is read-only.

Remarks

Alternates differs from GetAlternates in that the developer does not specify the focus of where to look for alternates in the collection of tokens. The Alternates collection returned by the Alternates property is the same as what would be returned from GetAlternates when specifying the first token, and the number of tokens in the Tokens collection.

Many recognitions, successful or not, frequently return several words or phrases that closely match the spoken sequence. The one most nearly matching the sequence with a high confidence level is returned as a successful recognition. The other words and phrases are returned as alternates that are available for examination.

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AudioLength Property

Note: This documentation is preliminary and is subject to change.

Gets the length of the audio this result contains.

Definition

Visual Basic	Public ReadOnly Property **AudioLength** As **TimeSpan**
C#	public **TimeSpan** **AudioLength** { get; }
Managed C++	public: __property **TimeSpan** get_**AudioLength**();
JScript	public function get **AudioLength**() : **TimeSpan**

Property Value

System.TimeSpan.

This property is read-only.

Remarks

This is the latest point that any of the times in the main result or alternates will refer to. This is equivalent to ullLength in RecoResultTimes.

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AudioPosition Property

Note: This documentation is preliminary and is subject to change.

Gets the time between the start of the stream and the start of the result audio.

Definition

Visual Basic	Public ReadOnly Property **AudioPosition** As **TimeSpan**
C#	public **TimeSpan** **AudioPosition** { get; }
Managed C++	public: __property **TimeSpan** get_**AudioPosition**();
JScript	public function get **AudioPosition**() : **TimeSpan**

Property Value

System.TimeSpan.

This property is read-only.

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IsEmulatedResult Property

Note: This documentation is preliminary and is subject to change.

Gets a value that specifies whether the result is a text-based emulation of a recognition result, for example from calling the EmulateRecognize method.

Definition

Visual Basic	Public ReadOnly Property **IsEmulatedResult** As **Boolean**
C#	public **bool** **IsEmulatedResult** { get; }
Managed C++	public: __property **bool** get_**IsEmulatedResult**();

JScript public function get **IsEmulatedResult**() : **boolean**

Property Value

System.Boolean.

This property is read-only.

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StartTime Property

Note: This documentation is preliminary and is subject to change.

Gets the instant in time, expressed as a date and time of day, that the user started speaking.

Definition

Visual Basic Public ReadOnly Property **StartTime** As **Date**
C# public **DateTime StartTime** { get; }
Managed C++ public: __property **DateTime** get_**StartTime**();
JScript public function get **StartTime**() : **DateTime**

Property Value

System.DateTime.

This property is read-only.

Remarks

For recognition from non-real time audio sources, currently StartTime should throw but could think about changing SAPI here. This is ftStreamTime from RecoResultTimes. It is possible to use this to measure the latency between the user finishing speaking and the recognition result being returned: TimeSpan latency = DateTime.Now - (result.StartTime + result.AudioLength)

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RecognitionRule Class

Note: This documentation is preliminary and is subject to change.

Represents the rule that allowed the associated result to be recognized.

Definition

Visual Basic	Public Class **RecognitionRule** Inherits *Object*
C#	public class **RecognitionRule** : *Object*
Managed C++	public __gc class **RecognitionRule** : public *Object*
JScript	public class **RecognitionRule** extends *Object*

Members Table

Inheritance Hierarchy

Object
Leave
RecognitionRule

Class Information

Namespace	System.Speech.Recognition
Assembly	System.Speech (system.speech.dll)
Strong Name	System.Speech, Version=6.0.4044.0, Culture=neutral, PublicKeyToken=365143bb27e7ac8b

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Confidence Property

Note: This documentation is preliminary and is subject to change.

Gets confidence score information that expresses how confident the speech Recognizer is that this is the correct rule.

Definition

Visual Basic	Public ReadOnly Property **Confidence** As **Confidence**
C#	public **Confidence** **Confidence** { get; }
Managed C++	public: __property **Confidence** get_**Confidence**();
JScript	public function get **Confidence**() : **Confidence**

Property Value

System.Speech.Recognition.Confidence.

This property is read-only.

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Name Property

Note: This documentation is preliminary and is subject to change.

Gets the name of the rule that was recognized.

Definition

Visual Basic	Public ReadOnly Property **Name** As **String**
C#	public **string** **Name** { get; }
Managed C++	public: __property **String*** get_**Name**();
JScript	public function get **Name**() : **String**

Property Value

System.String.

This property is read-only.

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RecognizerConfidence Property

Note: This documentation is preliminary and is subject to change.

Gets confidence score information that expresses how confident the speech Recognizer is that this is the correct rule.

Definition

Visual Basic	Public ReadOnly Property **RecognizerConfidence** As **Single**
C#	public **float** **RecognizerConfidence** { get; }
Managed C++	public: __property **float** get_**RecognizerConfidence**();
JScript	public function get **RecognizerConfidence**() : **float**

Property Value

System.Single.

This property is read-only.

Remarks

This value is not standardized across multiple speech Recognizers and can even change from version to version of a specific recognizer.

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Rules Property

Note: This documentation is preliminary and is subject to change.

Gets the RulesCollection returned by the Rules property. If this rule was constructed by referencing other rules, the referenced rules are contained in the collection.

Definition

Visual Basic	Public ReadOnly Property **Rules** As **RecognitionRuleCollection**
C#	public **RecognitionRuleCollection** **Rules** { get; }
Managed C++	public: __property **RecognitionRuleCollection*** get_**Rules**();
JScript	public function get **Rules**() : **RecognitionRuleCollection**

Property Value

System.Speech.Recognition.RecognitionRuleCollection.

This property is read-only.

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Text Property

Note: This documentation is preliminary and is subject to change.

Gets the display text for the recognition result that this rule encompasses.

Definition

Visual Basic	Public ReadOnly Property **Text** As **String**
C#	public **string** **Text** { get; }
Managed C++	public: __property **String*** get_**Text**();

JScript public function get **Text**() : **String**

Property Value

System.String.

This property is read-only.

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Tokens Property

Note: This documentation is preliminary and is subject to change.

Gets the set of tokens for the recognition result that this rule encompasses.

Definition

Visual Basic Public ReadOnly Property **Tokens** As **SpokenTokenCollection**
C# public **SpokenTokenCollection** **Tokens** { get; }
Managed C++ public: __property **SpokenTokenCollection*** get_**Tokens**();
JScript public function get **Tokens**() : **SpokenTokenCollection**

Property Value

System.Speech.Recognition.SpokenTokenCollection.

This property is read-only.

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RecognitionRuleCollection Class

Note: This documentation is preliminary and is subject to change.

Provides a collection of rules.

Definition

Visual Basic Public Class **RecognitionRuleCollection**
Inherits *ReadOnlyCollectionBase*
C# public class **RecognitionRuleCollection** : *ReadOnlyCollectionBase*

Managed C++ public __gc class **RecognitionRuleCollection** : public *ReadOnlyCollectionBase*

JScript public class **RecognitionRuleCollection** extends *ReadOnlyCollectionBase*

Members Table

Inheritance Hierarchy

Object [Leave]

ReadOnlyCollectionBase [Leave]

RecognitionRuleCollection

Class Information

Namespace System.Speech.Recognition

Assembly System.Speech (system.speech.dll)

Strong Name System.Speech, Version=6.0.4044.0, Culture=neutral, PublicKeyToken=365143bb27e7ac8b

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get_Item Method

Note: This documentation is preliminary and is subject to change.

Overload List

public RecognitionRule get_Item (String)
public RecognitionRule get_Item (Int32)

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Item Property

Note: This documentation is preliminary and is subject to change.

Gets the rule at the specified position.

Overload List

public RecognitionRule Item (Int32)
public RecognitionRule Item (String)

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RecognizeCompletedEventArgs Class

Note: This documentation is preliminary and is subject to change.

Provides event arguments for the RecognizeCompleted event.

Definition

Visual Basic	Public Class **RecognizeCompletedEventArgs** Inherits *err! bad xref: frlrfSystemComponentModelAsyncCompletedEventArgsClassTopic; lookup failure; no href; no caption;*
C#	public class **RecognizeCompletedEventArgs** : *err! bad xref: frlrfSystemComponentModelAsyncCompletedEventArgsClassTopic; lookup failure; no href; no caption;*
Managed C++	public __gc class **RecognizeCompletedEventArgs** : public *err! bad xref: frlrfSystemComponentModelAsyncCompletedEventArgsClassTopic; lookup failure; no href; no caption;*
JScript	public class **RecognizeCompletedEventArgs** extends *err! bad xref: frlrfSystemComponentModelAsyncCompletedEventArgsClassTopic; lookup failure; no href; no caption;*

Members Table

Inheritance Hierarchy

err! bad xref: frlrfSystemComponentModelAsyncCompletedEventArgsClassTopic; lookup failure; no href; no caption;
RecognizeCompletedEventArgs

Class Information

Namespace	System.Speech.Recognition
Assembly	System.Speech (system.speech.dll)
Strong Name	System.Speech, Version=6.0.4044.0, Culture=neutral, PublicKeyToken=365143bb27e7ac8b

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RecognizeCompletedEventArgs Method

Note: This documentation is preliminary and is subject to change.

Initializes a new instance of the RecognizeCompletedEventArgs class.

Definition

Visual Basic

```
Public Sub RecognizeCompletedEventArgs( _
   ByVal error As Exception, _
   ByVal cancelled As Boolean, _
   ByVal userToken As Object, _
   ByVal result As RecognitionResult _
)
```

C#

```
public RecognizeCompletedEventArgs(
   Exception error,
   bool cancelled,
   object userToken,
   RecognitionResult result
);
```

Managed C++

```
public: RecognizeCompletedEventArgs(
   Exception* error,
   bool cancelled,
   Object* userToken,
   RecognitionResult* result
);
```

JScript

```
public function RecognizeCompletedEventArgs(
   error : Exception,
   cancelled : boolean,
   userToken : Object,
   result : RecognitionResult
);
```

Parameters

error	**System.Exception**.
cancelled	**System.Boolean**.
userToken	**System.Object**.
result	**System.Speech.Recognition.RecognitionResult**. Result representing the last recognized phrase.

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Result Property

Note: This documentation is preliminary and is subject to change.

Gets the recognition result.

Definition

Visual Basic	Public ReadOnly Property **Result** As **RecognitionResult**
C#	public **RecognitionResult** **Result** { get; }
Managed C++	public: __property **RecognitionResult*** get_**Result**();
JScript	public function get **Result**() : **RecognitionResult**

Property Value

System.Speech.Recognition.RecognitionResult.

This property is read-only.

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RecognizeProgressChangedEventArgs Class

Note: This documentation is preliminary and is subject to change.

Provides data for the RecognizeProgressChanged event.

Definition

Visual Basic	Public Class **RecognizeProgressChangedEventArgs** Inherits *SpeechEventArgs*
C#	public class **RecognizeProgressChangedEventArgs** : *SpeechEventArgs*
Managed C++	public __gc class **RecognizeProgressChangedEventArgs** : public *SpeechEventArgs*
JScript	public class **RecognizeProgressChangedEventArgs** extends *SpeechEventArgs*

Members Table

Inheritance Hierarchy

Object Leave
EventArgs Leave
SpeechEventArgs
RecognizeProgressChangedEventArgs

Class Information

Namespace	System.Speech.Recognition
Assembly	System.Speech (system.speech.dll)
Strong Name	System.Speech, Version=6.0.4044.0, Culture=neutral, PublicKeyToken=365143bb27e7ac8b

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RecognizeProgressChangedEventArgs Method

Note: This documentation is preliminary and is subject to change.

Initializes a new instance of the AudioContentChangedEventArgs class.

Definition

Visual Basic

```
Public Sub RecognizeProgressChangedEventArgs( _
   ByVal audioPosition As TimeSpan, _
   ByVal recognizerPosition As TimeSpan, _
   ByVal audioLevel As Integer _
)
```

C#

```
public RecognizeProgressChangedEventArgs(
   TimeSpan audioPosition,
   TimeSpan recognizerPosition,
   int audioLevel
);
```

Managed C++

```
public: RecognizeProgressChangedEventArgs(
   TimeSpan audioPosition,
   TimeSpan recognizerPosition,
   int audioLevel
);
```

JScript

```
public function RecognizeProgressChangedEventArgs(
   audioPosition : TimeSpan,
   recognizerPosition : TimeSpan,
   audioLevel : int
);
```

Parameters

audioPosition	**System.TimeSpan**.
recognizerPosition	**System.TimeSpan**.
audioLevel	**System.Int32**.

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AudioLevel Property

Note: This documentation is preliminary and is subject to change.

Gets the old audio state.

Definition

Visual Basic	Public ReadOnly Property **AudioLevel** As **Integer**
C#	public **int** **AudioLevel** { get; }
Managed C++	public: __property **int** get_**AudioLevel**();
JScript	public function get **AudioLevel**() : **int**

Property Value

System.Int32.

This property is read-only.

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RecognizerPosition Property

Note: This documentation is preliminary and is subject to change.

Gets the recognizer position in the audio stream at the time the event is raised.

Definition

Visual Basic	Public ReadOnly Property **RecognizerPosition** As **TimeSpan**
C#	public **TimeSpan** **RecognizerPosition** { get; }
Managed C++	public: __property **TimeSpan** get_**RecognizerPosition**();
JScript	public function get **RecognizerPosition**() : **TimeSpan**

Property Value

System.TimeSpan.

This property is read-only.

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RecognizerAttributes Class

Note: This documentation is preliminary and is subject to change.

Represents the attributes various speech recognizers may, or may not support.

Definition

Visual Basic	Public Class **RecognizerAttributes** Inherits *Object*
C#	public class **RecognizerAttributes** : *Object*
Managed C++	public __gc class **RecognizerAttributes** : public *Object*
JScript	public class **RecognizerAttributes** extends *Object*

Members Table

Inheritance Hierarchy

Object Leave

RecognizerAttributes

Remarks

If this object is created directly, then trying to get properties that are not set yet will throw an exception. If this object is obtained from a recognizer then it is read-only and trying to set will have no effect.

Class Information

Namespace	System.Speech.Recognition
Assembly	System.Speech (system.speech.dll)
Strong Name	System.Speech, Version=6.0.4044.0, Culture=neutral, PublicKeyToken=365143bb27e7ac8b

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GetCustomAttribute Method

Note: This documentation is preliminary and is subject to change.

Gets the specified custom recognizer attribute.

Definition

```
Visual Basic
Public Function GetCustomAttribute( _
    ByVal attributeName As String _
) As String

C#
public string GetCustomAttribute(
    string attributeName
);

Managed C++
public: String* GetCustomAttribute(
    String* attributeName
);

JScript
public function GetCustomAttribute(
    attributeName : String
) : String;
```

Parameters

attributeName **System.String**.

Return Value

System.String.

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DisplayName Property

Note: This documentation is preliminary and is subject to change.

Gets the display name of the recognizer.

Definition

```
Visual Basic  Public ReadOnly Property DisplayName As String
C#            public string DisplayName { get; }
Managed C++   public: __property String* get_DisplayName();
JScript       public function get DisplayName() : String
```

Property Value

System.String.

This property is read-only.

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Id Property

Note: This documentation is preliminary and is subject to change.

Gets the unique ID of this recognizer.

Definition

Visual Basic	Public ReadOnly Property **Id** As **String**
C#	public **string Id** { get; }
Managed C++	public: __property **String*** get_**Id**();
JScript	public function get **Id**() : **String**

Property Value

System.String.

This property is read-only.

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IsVendorPreferred Property

Note: This documentation is preliminary and is subject to change.

Gets a value that specifies, if multiple recognizers are installed on the machine by the same vendor, whether this recognizer is the one preferred by the vendor.

Definition

Visual Basic	Public ReadOnly Property **IsVendorPreferred** As **Boolean**
C#	public **bool IsVendorPreferred** { get; }
Managed C++	public: __property **bool** get_**IsVendorPreferred**();
JScript	public function get **IsVendorPreferred**() : **boolean**

Property Value

System.Boolean.

This property is read-only.

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Languages Property

Note: This documentation is preliminary and is subject to change.

Gets the CultureInfo IDs of the languages this engine recognizes.

Definition

Visual Basic	Public ReadOnly Property **Languages** As **CultureInfo Class**()
C#	public **CultureInfo Class**[] **Languages** { get; }
Managed C++	public: __property **CultureInfo Class*** get_**Languages**();
JScript	public function get **Languages**() : **CultureInfo Class**[]

Property Value

System.Globalization.CultureInfo.

This property is read-only.

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Name Property

Note: This documentation is preliminary and is subject to change.

Gets the name of the recognizer.

Definition

Visual Basic	Public ReadOnly Property **Name** As **String**
C#	public **string Name** { get; }
Managed C++	public: __property **String*** get_**Name**();
JScript	public function get **Name**() : **String**

Property Value

System.String.

This property is read-only.

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SupportedAudioFormats Property

Note: This documentation is preliminary and is subject to change.

Gets the audio formats this engine supports.

Definition

Visual Basic	Public ReadOnly Property **SupportedAudioFormats** As **Object**()
C#	public **object**[] **SupportedAudioFormats** { get; }
Managed C++	public: __property **Object*** get_**SupportedAudioFormats**();
JScript	public function get **SupportedAudioFormats**() : **Object**[]

Property Value

System.Object.

This property is read-only.

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SupportsCommandAlternates Property

Note: This documentation is preliminary and is subject to change.

Gets a value that specifies whether the recognizer supports alternates for command and control results.

Definition

Visual Basic	Public ReadOnly Property **SupportsCommandAlternates** As **Boolean**
C#	public **bool** **SupportsCommandAlternates** { get; }
Managed C++	public: __property **bool** get_**SupportsCommandAlternates**();
JScript	public function get **SupportsCommandAlternates**() : **boolean**

Property Value

System.Boolean.

This property is read-only.

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SupportsCommands Property

Note: This documentation is preliminary and is subject to change.

Gets a value that specifies whether the recognizer supports command and control.

Definition

Visual Basic	Public ReadOnly Property **SupportsCommands** As **Boolean**
C#	public **bool SupportsCommands** { get; }
Managed C++	public: __property **bool** get_**SupportsCommands**();
JScript	public function get **SupportsCommands**() : **boolean**

Property Value

System.Boolean.

This property is read-only.

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SupportsContinuousRecognition Property

Note: This documentation is preliminary and is subject to change.

Gets a value that specifies whether the recognizer supports continuous recognition, which does not require pauses between words.

Definition

Visual Basic	Public ReadOnly Property **SupportsContinuousRecognition** As **Boolean**
C#	public **bool SupportsContinuousRecognition** { get; }
Managed C++	public: __property **bool** get_**SupportsContinuousRecognition**();
JScript	public function get **SupportsContinuousRecognition**() : **boolean**

Property Value

System.Boolean.

This property is read-only.

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SupportsDesktop Property

Note: This documentation is preliminary and is subject to change.

Gets a value that specifies whether the recognizer supports desktop audio input.

Definition

Visual Basic	Public ReadOnly Property **SupportsDesktop** As **Boolean**
C#	public **bool SupportsDesktop** { get; }
Managed C++	public: __property **bool** get_**SupportsDesktop**();
JScript	public function get **SupportsDesktop**() : **boolean**

Property Value

System.Boolean.

This property is read-only.

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SupportsDictation Property

Note: This documentation is preliminary and is subject to change.

Gets a value that specifies whether the recognizer supports dictation.

Definition

Visual Basic	Public ReadOnly Property **SupportsDictation** As **Boolean**
C#	public **bool SupportsDictation** { get; }
Managed C++	public: __property **bool** get_**SupportsDictation**();
JScript	public function get **SupportsDictation**() : **boolean**

Property Value

System.Boolean.

This property is read-only.

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SupportsDictationAlternates Property

Note: This documentation is preliminary and is subject to change.

Gets a value that specifies whether the recognizer supports alternates for dictation results.

Definition

Visual Basic	Public ReadOnly Property **SupportsDictationAlternates** As **Boolean**
C#	public **bool SupportsDictationAlternates** { get; }
Managed C++	public: __property **bool** get_**SupportsDictationAlternates**();
JScript	public function get **SupportsDictationAlternates**() : **boolean**

Property Value

System.Boolean.

This property is read-only.

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SupportsDictationInCfgAnywhere Property

Note: This documentation is preliminary and is subject to change.

Gets a value that specifies whether the recognizer supports dictation transitions in context-free grammar recognition anywhere in the rule.

Definition

Visual Basic	Public ReadOnly Property **SupportsDictationInCfgAnywhere** As **Boolean**
C#	public **bool SupportsDictationInCfgAnywhere** { get; }
Managed C++	public: __property **bool** get_**SupportsDictationInCfgAnywhere**();
JScript	public function get **SupportsDictationInCfgAnywhere**() : **boolean**

Property Value

System.Boolean.

This property is read-only.

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SupportsDiscreteRecognition Property

Note: This documentation is preliminary and is subject to change.

Gets a value that specifies whether the recognizer supports discrete recognition, which requires pauses between words.

Definition

Visual Basic	Public ReadOnly Property **SupportsDiscreteRecognition** As **Boolean**
C#	public **bool SupportsDiscreteRecognition** { get; }
Managed C++	public: __property **bool** get_**SupportsDiscreteRecognition**();
JScript	public function get **SupportsDiscreteRecognition**() : **boolean**

Property Value

System.Boolean.

This property is read-only.

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SupportsHypotheses Property

Note: This documentation is preliminary and is subject to change.

Gets a value that specifies whether the recognizer supports sending hypotheses before final recognition.

Definition

Visual Basic	Public ReadOnly Property **SupportsHypotheses** As **Boolean**
C#	public **bool SupportsHypotheses** { get; }
Managed C++	public: __property **bool** get_**SupportsHypotheses**();
JScript	public function get **SupportsHypotheses**() : **boolean**

Property Value

System.Boolean.

This property is read-only.

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SupportsMobileDevice Property

Note: This documentation is preliminary and is subject to change.

Gets a value that specifies whether the recognizer is tuned for use on a hand-held device.

Definition

Visual Basic	Public ReadOnly Property **SupportsMobileDevice** As **Boolean**
C#	public **bool SupportsMobileDevice** { get; }
Managed C++	public: __property **bool** get_**SupportsMobileDevice**();
JScript	public function get **SupportsMobileDevice**() : **boolean**

Property Value

System.Boolean.

This property is read-only.

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SupportsRemoteDevice Property

Note: This documentation is preliminary and is subject to change.

Gets a value that specifies whether the recognizer is tuned to recognize audio streamed from a device to a server.

Definition

Visual Basic	Public ReadOnly Property **SupportsRemoteDevice** As **Boolean**
C#	public **bool SupportsRemoteDevice** { get; }
Managed C++	public: __property **bool** get_**SupportsRemoteDevice**();
JScript	public function get **SupportsRemoteDevice**() : **boolean**

Property Value

System.Boolean.

This property is read-only.

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SupportsTelephony Property

Note: This documentation is preliminary and is subject to change.

Gets a value that specifies whether the recognizer supports telephony audio input.

Definition

Visual Basic	Public ReadOnly Property **SupportsTelephony** As **Boolean**
C#	public **bool SupportsTelephony** { get; }
Managed C++	public: __property **bool** get_**SupportsTelephony**();
JScript	public function get **SupportsTelephony**() : **boolean**

Property Value

System.Boolean.

This property is read-only.

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SupportsTrailingDictationInCfg Property

Note: This documentation is preliminary and is subject to change.

Gets a value that specifies whether the recognizer supports dictation in context-free grammar recognition anywhere in the rule.

Definition

Visual Basic	Public ReadOnly Property **SupportsTrailingDictationInCfg** As **Boolean**
C#	public **bool SupportsTrailingDictationInCfg** { get; }
Managed C++	public: __property **bool** get_**SupportsTrailingDictationInCfg**();
JScript	public function get **SupportsTrailingDictationInCfg**() : **boolean**

Property Value

System.Boolean.

This property is read-only.

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SupportsTrailingWildcardInCfg Property

Note: This documentation is preliminary and is subject to change.

Gets a value that specifies whether the recognizer supports wildcard transitions in context-free grammar recognition at the end of the rule.

Definition

Visual Basic	Public ReadOnly Property **SupportsTrailingWildcardInCfg** As **Boolean**
C#	public **bool SupportsTrailingWildcardInCfg** { get; }
Managed C++	public: __property **bool** get_**SupportsTrailingWildcardInCfg**();
JScript	public function get **SupportsTrailingWildcardInCfg**() : **boolean**

Property Value

System.Boolean.

This property is read-only.

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SupportsTrailingWordSequences Property

Note: This documentation is preliminary and is subject to change.

Gets a value that specifies whether the recognizer supports word sequences in context-free grammar recognition at the end of the rule.

Definition

Visual Basic	Public ReadOnly Property **SupportsTrailingWordSequences** As **Boolean**
C#	public **bool SupportsTrailingWordSequences** { get; }
Managed C++	public: __property **bool** get_**SupportsTrailingWordSequences**();
JScript	public function get **SupportsTrailingWordSequences**() : **boolean**

Property Value

System.Boolean.

This property is read-only.

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SupportsWildcardInCfgAnywhere Property

Note: This documentation is preliminary and is subject to change.

Gets a value that specifies whether the recognizer supports wildcard transitions in context-free grammar recognition anywhere in the rule.

Definition

Visual Basic	Public ReadOnly Property **SupportsWildcardInCfgAnywhere** As **Boolean**
C#	public **bool** **SupportsWildcardInCfgAnywhere** { get; }
Managed C++	public: __property **bool** get_**SupportsWildcardInCfgAnywhere**();
JScript	public function get **SupportsWildcardInCfgAnywhere**() : **boolean**

Property Value

System.Boolean.

This property is read-only.

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SupportsWordSequencesAnywhere Property

Note: This documentation is preliminary and is subject to change.

Gets a value that specifies whether the recognizer supports word sequences in context-free grammar recognition anywhere in the rule.

Definition

Visual Basic	Public ReadOnly Property **SupportsWordSequencesAnywhere** As **Boolean**
C#	public **bool** **SupportsWordSequencesAnywhere** { get; }
Managed C++	public: __property **bool** get_**SupportsWordSequencesAnywhere**();

JScript public function get **SupportsWordSequencesAnywhere**() : **boolean**

Property Value

System.Boolean.

This property is read-only.

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Vendor Property

Note: This documentation is preliminary and is subject to change.

Gets the company name of the vendor that authored the recognizer.

Definition

Visual Basic	Public ReadOnly Property **Vendor** As **String**
C#	public **string Vendor** { get; }
Managed C++	public: __property **String*** get_**Vendor**();
JScript	public function get **Vendor**() : **String**

Property Value

System.String.

This property is read-only.

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RecognizerProperties Class

Note: This documentation is preliminary and is subject to change.

Represents recognizer properties that are adjustable at runtime.

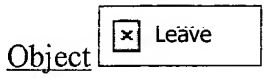
Definition

Visual Basic	Public Class **RecognizerProperties** Inherits *Object*
C#	public class **RecognizerProperties** : *Object*

Managed C++ public __gc class **RecognizerProperties** : public *Object*
JScript public class **RecognizerProperties** extends *Object*

Members Table

Inheritance Hierarchy



RecognizerProperties

Class Information

Namespace System.Speech.Recognition
Assembly System.Speech (system.speech.dll)
Strong Name System.Speech, Version=6.0.4044.0, Culture=neutral, PublicKeyToken=365143bb27e7ac8b

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GetProperty Method

Note: This documentation is preliminary and is subject to change.

Gets a property from the underlying recognizer object.

Definition

Visual Basic
```
Public Function GetProperty( _
   ByVal propertyName As String _
) As Object
```

C#
```
public object GetProperty(
   string propertyName
);
```

Managed C++
```
public: Object* GetProperty(
   String* propertyName
);
```

JScript
```
public function GetProperty(
   propertyName : String
) : Object;
```

Parameters

propertyName **System.String**. The Name of the property to get

Return Value

System.Object.

The value of the property

Remarks

If the underlying Recognizer does not support this property, an exception will be thrown. The property is returned as an object, since the property can either be a string or a long. It is up to the caller to convert this object into the appropriate type (e.g. long l = GetProperty ("foo") as long;)

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SetProperty Method

Note: This documentation is preliminary and is subject to change.

Sets a property on the underlying recognizer object.

Overload List

public Void SetProperty (String, String)
public Void SetProperty (String, Int32)

Remarks

If the underlying Recognizer does not support this property, an exception will be thrown.

If the underlying Recognizer does not support this property, an exception will be thrown.

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ComplexResponseSpeed Property

Note: This documentation is preliminary and is subject to change.

Gets and sets the amount of time in milliseconds that defines the end of a recognition, when the recognition is ambiguous.

Definition

Visual Basic	Public Property **ComplexResponseSpeed** As **TimeSpan**
C#	public **TimeSpan ComplexResponseSpeed** { get; set; }
Managed C++	public: __property **TimeSpan** get_**ComplexResponseSpeed**(); public: __property void set_**ComplexResponseSpeed**(**TimeSpan**);
JScript	public function get **ComplexResponseSpeed**() : **TimeSpan** public function set **ComplexResponseSpeed**(**TimeSpan**);

Property Value

System.TimeSpan.

This property is read/write.

Remarks

This attribute is used when the recognition is ambiguous. For example, in the case of a CFG which has two sentences: 1) new game please and 2) new game, an ambiguous recognition would be new game. This property's value must be greater than the ResponseSpeed value. If the underlying Recognizer does not support this property, an exception will be thrown. Range: 0 - 10,000 ms, default 500 ms

---

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HighConfidenceThreshold Property

Note: This documentation is preliminary and is subject to change.

Gets and sets the boundary between the high and medium confidence range.

Definition

Visual Basic	Public Property **HighConfidenceThreshold** As **Integer**
C#	public **int HighConfidenceThreshold** { get; set; }
Managed C++	public: __property **int** get_**HighConfidenceThreshold**(); public: __property void set_**HighConfidenceThreshold**(**int**);
JScript	public function get **HighConfidenceThreshold**() : **int** public function set **HighConfidenceThreshold**(**int**);

Property Value

System.Int32.

This property is read/write.

Remarks

The location of the low confidence, normal confidence, and high confidence markers control how the confidence of a word is labeled. The HighConfidenceThreshold (HCT) separates the high and medium confidence range. The NormalConfidenceThreshold (NCT) separates the medium and the low confidence thresholds. The LowConfidenceThreshold (LCT) separates the low and rejected confidence range. If the all three confidences are equal to 0, then all words will have high confidence. If all three confidences are equal to 100, then all words will have low confidence. If the underlying Recognizer does not support this property, an exception will be thrown. Range: 0 - 100, default 80

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IsAdaptationOn Property

Note: This documentation is preliminary and is subject to change.

Gets and sets a value that indicates whether the recognition engine should adapt the acoustic model.

Definition

Visual Basic	Public Property **IsAdaptationOn** As **Boolean**
C#	public **bool** **IsAdaptationOn** { get; set; }
Managed C++	public: __property **bool** get_**IsAdaptationOn**(); public: __property void set_**IsAdaptationOn**(**bool**);
JScript	public function get **IsAdaptationOn**() : **boolean** public function set **IsAdaptationOn**(**boolean**);

Property Value

System.Boolean.

This property is read/write.

Remarks

If the underlying Recognizer does not support this property, an exception will be thrown. Default: true

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LowConfidenceThreshold Property

Note: This documentation is preliminary and is subject to change.

Gets and sets the boundary between the low and rejected confidence range.

Definition

Visual Basic	Public Property **LowConfidenceThreshold** As **Integer**
C#	public **int** **LowConfidenceThreshold** { get; set; }
Managed C++	public: __property **int** get_**LowConfidenceThreshold**(); public: __property void set_**LowConfidenceThreshold**(**int**);
JScript	public function get **LowConfidenceThreshold**() : **int** public function set **LowConfidenceThreshold**(**int**);

Property Value

System.Int32.

This property is read/write.

Remarks

The location of the low confidence, normal confidence, and high confidence markers control how the confidence of a word is labeled. The HighConfidenceThreshold (HCT) separates the high and medium confidence range. The NormalConfidenceThreshold (NCT) separates the medium and the low confidence thresholds. The LowConfidenceThreshold (LCT) separates the low and rejected confidence range. If the all three confidences are equal to 0, then all words will have high confidence. If all three confidences are equal to 100, then all words will have low confidence. If the underlying Recognizer does not support this property, an exception will be thrown. Range: 0 - 100, default 20

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NormalConfidenceThreshold Property

Note: This documentation is preliminary and is subject to change.

Gets and sets the boundary between the medium and low confidence range.

Definition

Visual Basic	Public Property **NormalConfidenceThreshold** As **Integer**
C#	public **int** **NormalConfidenceThreshold** { get; set; }
Managed C++	public: __property **int** get_**NormalConfidenceThreshold**(); public: __property void set_**NormalConfidenceThreshold**(**int**);
JScript	public function get **NormalConfidenceThreshold**() : **int** public function set **NormalConfidenceThreshold**(**int**);

Property Value

System.Int32.

This property is read/write.

Remarks

The location of the low confidence, normal confidence, and high confidence markers control how the confidence of a word is labeled. The HighConfidenceThreshold (HCT) separates the high and medium confidence range. The NormalConfidenceThreshold (NCT) separates the medium and the low confidence thresholds. The LowConfidenceThreshold (LCT) separates the low and rejected confidence range. If the all three confidences are equal to 0, then all words will have high confidence. If all three confidences are equal to 100, then all words will have low confidence. If the underlying Recognizer does not support this property, an exception will be thrown. Range: 0 - 100, default 50

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ResourceUsage Property

Note: This documentation is preliminary and is subject to change.

Gets and sets CPU resource consumption. As resource usage increases, so does the use of CPU resources.

Definition

Visual Basic	Public Property **ResourceUsage** As **Integer**
C#	public **int ResourceUsage** { get; set; }
Managed C++	public: __property **int** get_**ResourceUsage**(); public: __property void set_**ResourceUsage**(**int**);
JScript	public function get **ResourceUsage**() : **int** public function set **ResourceUsage**(**int**);

Property Value

System.Int32.

This property is read/write.

Remarks

If the underlying Recognizer does not support this property, an exception is thrown. Range: 0 - 100, default 50.

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ResponseSpeed Property

Note: This documentation is preliminary and is subject to change.

Gets and sets the amount of time in milliseconds that defines the end of a recognition, when the recognition is not ambiguous.

Definition

Visual Basic	Public Property **ResponseSpeed** As **TimeSpan**
C#	public **TimeSpan ResponseSpeed** { get; set; }
Managed C++	public: __property **TimeSpan** get_**ResponseSpeed**(); public: __property void set_**ResponseSpeed**(**TimeSpan**);
JScript	public function get **ResponseSpeed**() : **TimeSpan** public function set **ResponseSpeed**(**TimeSpan**);

Property Value

System.TimeSpan.

This property is read/write.

Remarks

This attribute is used when the recognition is not ambiguous. For example, in the case of a context-free grammar (CFG) which has two sentences: 1) new game please and 2) new game, a non-ambiguous recognition would be new game please. If the underlying Recognizer does not support this property, an exception will be thrown. Range: 0 - 10,000 ms, default 150 ms

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Recognizers Class

Note: This documentation is preliminary and is subject to change.

Represents a collection of speech recognizers.

Definition

Visual Basic	Public Class **Recognizers**

Inherits *ReadOnlyCollectionBase*

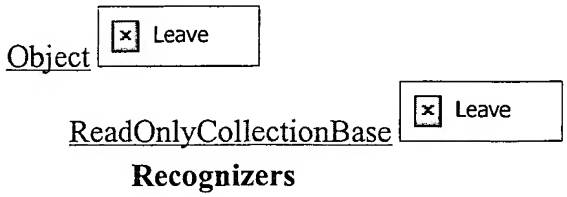
C# public class **Recognizers** : *ReadOnlyCollectionBase*

Managed C++ public __gc class **Recognizers** : public *ReadOnlyCollectionBase*

JScript public class **Recognizers** extends *ReadOnlyCollectionBase*

Members Table

Inheritance Hierarchy



Remarks

This class can't be created directly, but is obtained from the static AvailableRecognizers fields or GetAvailableRecognizers method.

Class Information

Namespace System.Speech.Recognition

Assembly System.Speech (system.speech.dll)

Strong Name System.Speech, Version=6.0.4044.0, Culture=neutral, PublicKeyToken=365143bb27e7ac8b

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AvailableRecognizers Property

Note: This documentation is preliminary and is subject to change.

Gets the attributes of all the recognizers that are installed on the system.

Definition

Visual Basic Public Shared ReadOnly Property **AvailableRecognizers** As **Recognizers**

C# public static **Recognizers** **AvailableRecognizers** { get; }

Managed C++ public: __property static **Recognizers*** get_**AvailableRecognizers**();

JScript public static function get **AvailableRecognizers**() : **Recognizers**

Property Value

System.Speech.Recognition.Recognizers.

This property is read-only.

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Item Property

Note: This documentation is preliminary and is subject to change.

Gets the specified attribute.

Definition

Visual Basic
```
Public ReadOnly Property Item( _
    ByVal index As Integer _
) As RecognizerAttributes
```

C#
```
public RecognizerAttributes this[
    int index
] { get; }
```

Managed C++
```
public: __property RecognizerAttributes* get_Item(
    int index
);
```

JScript In JScript, you can use indexed properties, but you cannot define your own.

Property Value

System.Speech.Recognition.RecognizerAttributes.

This property is read-only.

Parameters

index **System.Int32**. The zero-based index of the desired attribute.

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RecognizerStateChangedEventArgs Class

Note: This documentation is preliminary and is subject to change.

Provides data for the RecognizerStateChanged event.

Definition

Visual Basic	Public Class **RecognizerStateChangedEventArgs** Inherits *SpeechEventArgs*
C#	public class **RecognizerStateChangedEventArgs** : *SpeechEventArgs*
Managed C++	public __gc class **RecognizerStateChangedEventArgs** : public *SpeechEventArgs*
JScript	public class **RecognizerStateChangedEventArgs** extends *SpeechEventArgs*

Members Table

Inheritance Hierarchy

Object Leave
EventArgs Leave
SpeechEventArgs
RecognizerStateChangedEventArgs

Class Information

Namespace	System.Speech.Recognition
Assembly	System.Speech (system.speech.dll)
Strong Name	System.Speech, Version=6.0.4044.0, Culture=neutral, PublicKeyToken=365143bb27e7ac8b

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RecognizerStateChangedEventArgs Method

Note: This documentation is preliminary and is subject to change.

Initializes a new instance of the RecognizerStateChangedEventArgs class.

Definition

Visual Basic

```
Public Sub RecognizerStateChangedEventArgs( _
   ByVal audioPosition As TimeSpan, _
   ByVal state As RecognizerState _
)
```

C#

```
public RecognizerStateChangedEventArgs(
   TimeSpan audioPosition,
   RecognizerState state
);
```

Managed C++	public: **RecognizerStateChangedEventArgs(** **TimeSpan** *audioPosition*, **RecognizerState** *state* **);**
JScript	public function **RecognizerStateChangedEventArgs(** *audioPosition* : **TimeSpan**, *state* : **RecognizerState** **);**

Parameters

audioPosition	**System.TimeSpan**. Placeholder
state	**System.Speech.Recognition.RecognizerState**.

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State Property

Note: This documentation is preliminary and is subject to change.

Gets the updated audio state.

Definition

Visual Basic	Public ReadOnly Property **State** As **RecognizerState**
C#	public **RecognizerState State** { get; }
Managed C++	public: __property **RecognizerState** get_**State**();
JScript	public function get **State**() : **RecognizerState**

Property Value

System.Speech.Recognition.RecognizerState.

This property is read-only.

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Rule Class

Note: This documentation is preliminary and is subject to change.

Represents a grammar rule.

Definition

Visual Basic	Public Class **Rule** Inherits *Object*
C#	public class **Rule** : *Object*
Managed C++	public __gc class **Rule** : public *Object*
JScript	public class **Rule** extends *Object*

Members Table

Inheritance Hierarchy

Object
Leave
Rule

Class Information

Namespace	System.Speech.Recognition
Assembly	System.Speech (system.speech.dll)
Strong Name	System.Speech, Version=6.0.4044.0, Culture=neutral, PublicKeyToken=365143bb27e7ac8b

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Rule Method

Note: This documentation is preliminary and is subject to change.

Initializes a new instance of the Rule class.

Definition

Visual Basic	Public Sub **Rule**()
C#	public **Rule**();
Managed C++	public: **Rule**();
JScript	public function **Rule**();

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IsActive Property

Note: This documentation is preliminary and is subject to change.

Gets or sets the state of a grammar rule.

Definition

Visual Basic	Public Property **IsActive** As **Boolean**
C#	public **bool** **IsActive** { get; set; }
Managed C++	public: __property **bool** get_**IsActive**(); public: __property void set_**IsActive**(**bool**);
JScript	public function get **IsActive**() : **boolean** public function set **IsActive**(**boolean**);

Property Value

System.Boolean.

This property is read/write.

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Name Property

Note: This documentation is preliminary and is subject to change.

Gets the name of the rule.

Definition

Visual Basic	Public ReadOnly Property **Name** As **String**
C#	public **string** **Name** { get; }
Managed C++	public: __property **String*** get_**Name**();
JScript	public function get **Name**() : **String**

Property Value

System.String.

This property is read-only.

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RuleCollection Class

Note: This documentation is preliminary and is subject to change.

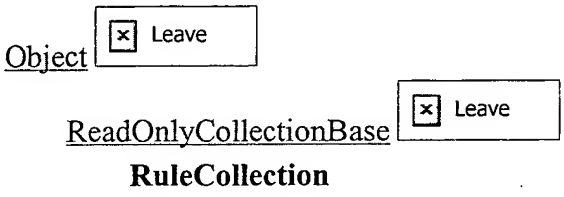
Represents a collection of Rules.

Definition

Visual Basic	Public Class **RuleCollection** Inherits *ReadOnlyCollectionBase*
C#	public class **RuleCollection** : *ReadOnlyCollectionBase*
Managed C++	public __gc class **RuleCollection** : public *ReadOnlyCollectionBase*
JScript	public class **RuleCollection** extends *ReadOnlyCollectionBase*

Members Table

Inheritance Hierarchy



Class Information

Namespace	System.Speech.Recognition
Assembly	System.Speech (system.speech.dll)
Strong Name	System.Speech, Version=6.0.4044.0, Culture=neutral, PublicKeyToken=365143bb27e7ac8b

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get_Item Method

Note: This documentation is preliminary and is subject to change.

Overload List

public Rule get_Item (String)
public Rule get_Item (Int32)

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Item Property

Note: This documentation is preliminary and is subject to change.

Gets the specified rule.

Overload List

public Rule Item (Int32)
public Rule Item (String)

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SemanticProperty Class

Note: This documentation is preliminary and is subject to change.

Represents a single semantic property that may contain additional levels of semantic information.

Definition

Visual Basic	Public Class **SemanticProperty** Inherits *Object*
C#	public class **SemanticProperty** : *Object*
Managed C++	public __gc class **SemanticProperty** : public *Object*
JScript	public class **SemanticProperty** extends *Object*

Members Table

Inheritance Hierarchy

Object Leave
SemanticProperty

Class Information

Namespace	System.Speech.Recognition
Assembly	System.Speech (system.speech.dll)
Strong Name	System.Speech, Version=6.0.4044.0, Culture=neutral, PublicKeyToken=365143bb27e7ac8b

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Confidence Property

Note: This documentation is preliminary and is subject to change.

Gets the confidence score information relating to the semantic property.

Definition

Visual Basic	Public ReadOnly Property **Confidence** As **Confidence**
C#	public **Confidence** **Confidence** { get; }
Managed C++	public: __property **Confidence** get_**Confidence**();
JScript	public function get **Confidence**() : **Confidence**

Property Value

System.Speech.Recognition.Confidence.

This property is read-only.

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Name Property

Note: This documentation is preliminary and is subject to change.

Gets the name of this semantic property.

Definition

Visual Basic	Public ReadOnly Property **Name** As **String**
C#	public **string** **Name** { get; }
Managed C++	public: __property **String*** get_**Name**();
JScript	public function get **Name**() : **String**

Property Value

System.String.

This property is read-only.

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Properties Property

Note: This documentation is preliminary and is subject to change.

Gets the collection of child semantic properties of this property.

Definition

Visual Basic	Public ReadOnly Property **Properties** As **SemanticPropertyCollection**
C#	public **SemanticPropertyCollection** **Properties** { get; }
Managed C++	public: __property **SemanticPropertyCollection*** get_**Properties**();
JScript	public function get **Properties**() : **SemanticPropertyCollection**

Property Value

System.Speech.Recognition.SemanticPropertyCollection.

This property is read-only.

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RecognizerConfidence Property

Note: This documentation is preliminary and is subject to change.

Gets the confidence value for this semantic property computed by the speech recognition engine.

Definition

Visual Basic	Public ReadOnly Property **RecognizerConfidence** As **Single**
C#	public **float** **RecognizerConfidence** { get; }
Managed C++	public: __property **float** get_**RecognizerConfidence**();
JScript	public function get **RecognizerConfidence**() : **float**

Property Value

System.Single.

This property is read-only.

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Text Property

Note: This documentation is preliminary and is subject to change.

Gets the text of this semantic property.

Definition

Visual Basic	Public ReadOnly Property **Text** As **String**
C#	public **string Text** { get; }
Managed C++	public: __property **String*** get_**Text**();
JScript	public function get **Text**() : **String**

Property Value

System.String.

This property is read-only.

Remarks

For example, for the Solitaire PlayCard rule, the Text for the Rank property may be "ace", "two", "three", etc.

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Tokens Property

Note: This documentation is preliminary and is subject to change.

Gets the tokens that correspond to this semantic property.

Definition

Visual Basic	Public ReadOnly Property **Tokens** As **SpokenTokenCollection**
C#	public **SpokenTokenCollection Tokens** { get; }
Managed C++	public: __property **SpokenTokenCollection*** get_**Tokens**();
JScript	public function get **Tokens**() : **SpokenTokenCollection**

Property Value

System.Speech.Recognition.SpokenTokenCollection.

This property is read-only.

Remarks

For example, for the Solitaire PlayCard rule, the Tokens collection for the Rank property probably just contains one token, and it could contain "ace", "two", "three", etc.

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Value Property

Note: This documentation is preliminary and is subject to change.

Gets the value of this semantic property.

Definition

Visual Basic	Public ReadOnly Property **Value** As **Object**
C#	public **object Value** { get; }
Managed C++	public: __property **Object*** get_**Value**();
JScript	public function get **Value**() : **Object**

Property Value

System.Object.

This property is read-only.

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SemanticPropertyCollection Class

Note: This documentation is preliminary and is subject to change.

Represents a collection of semantic properties.

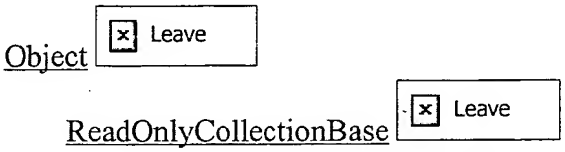
Definition

Visual Basic	Public Class **SemanticPropertyCollection** Inherits *ReadOnlyCollectionBase*
C#	public class **SemanticPropertyCollection** : *ReadOnlyCollectionBase*

Managed public __gc
C++ class **SemanticPropertyCollection** : public *ReadOnlyCollectionBase*
JScript public class **SemanticPropertyCollection** extends *ReadOnlyCollectionBase*

Members Table

Inheritance Hierarchy



Class Information

Namespace System.Speech.Recognition
Assembly System.Speech (system.speech.dll)
Strong Name System.Speech, Version=6.0.4044.0, Culture=neutral, PublicKeyToken=365143bb27e7ac8b

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get_Item Method

Note: This documentation is preliminary and is subject to change.

Overload List

public SemanticProperty get_Item (String)
public SemanticProperty get_Item (Int32)

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Item Property

Note: This documentation is preliminary and is subject to change.

Gets the specified SemanticProperty.

Overload List

public SemanticProperty Item (Int32)
public SemanticProperty Item (String)

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SpeechEventArgs Class

Note: This documentation is preliminary and is subject to change.

Provides data for these events: NoRecognition, AudioLevelChanged, RecognitionStarted, RecognitionStopped, RecognitionCanceled, RecognitionPaused, and RecognitionResumed.

Definition

Visual Basic	Public Class **SpeechEventArgs** Inherits *EventArgs*
C#	public class **SpeechEventArgs** : *EventArgs*
Managed C++	public __gc class **SpeechEventArgs** : public *EventArgs*
JScript	public class **SpeechEventArgs** extends *EventArgs*

Members Table

Inheritance Hierarchy

Object Leave
EventArgs Leave
SpeechEventArgs
ActiveCategoryChangedEventArgs
AudioContentChangedEventArgs
BookmarkEventArgs
CommandRecognitionEventArgs
InterferenceEventArgs
RecognitionEventArgs
RecognizeProgressChangedEventArgs
RecognizerStateChangedEventArgs
UpdateEventArgs

Class Information

Namespace	System.Speech.Recognition
Assembly	System.Speech (system.speech.dll)

Strong Name	System.Speech, Version=6.0.4044.0, Culture=neutral, PublicKeyToken=365143bb27e7ac8b

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SpeechEventArgs Method

Note: This documentation is preliminary and is subject to change.

Initializes a new instance of the SpeechEventArgs class.

Definition

Visual Basic
```
Public Sub SpeechEventArgs( _
    ByVal audioPosition As TimeSpan _
)
```

C#
```
public SpeechEventArgs(
    TimeSpan audioPosition
);
```

Managed C++
```
public: SpeechEventArgs(
    TimeSpan audioPosition
);
```

JScript
```
public function SpeechEventArgs(
    audioPosition : TimeSpan
);
```

Parameters

audioPosition **System.TimeSpan**. Placeholder

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AudioPosition Property

Note: This documentation is preliminary and is subject to change.

Gets the time the event occurred, relative to the start of the stream.

Definition

Visual Basic
```
Public ReadOnly Property AudioPosition As TimeSpan
```

C#
```
public TimeSpan AudioPosition { get; }
```

Managed C++ public: __property **TimeSpan** get_**AudioPosition**();
JScript public function get **AudioPosition**() : **TimeSpan**

Property Value

System.TimeSpan.

This property is read-only.

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SpokenToken Class

Note: This documentation is preliminary and is subject to change.

Represents a token, in western languages this is typically a word , that was recognized by the speech recognizer.

Definition

Visual Basic Public Class **SpokenToken**
Inherits *Object*
C# public class **SpokenToken** : *Object*
Managed C++ public __gc class **SpokenToken** : public *Object*
JScript public class **SpokenToken** extends *Object*

Members Table

Inheritance Hierarchy

Object
Leave
SpokenToken

Class Information

Namespace System.Speech.Recognition
Assembly System.Speech (system.speech.dll)
Strong Name System.Speech, Version=6.0.4044.0, Culture=neutral, PublicKeyToken=365143bb27e7ac8b

---

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ToString Method

Note: This documentation is preliminary and is subject to change.

Gets the spoken text of the token.

Definition

Visual Basic	Overrides Public Function **ToString**() As **String**
C#	public override **string ToString**();
Managed C++	public: **String*** **ToString**();
JScript	public override function **ToString**() : **String**;

Return Value

System.String.

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Audio Property

Note: This documentation is preliminary and is subject to change.

Gets the captured audio that corresponds to this recognized token.

Definition

Visual Basic	Public ReadOnly Property **Audio** As **RecognitionAudio**
C#	public **RecognitionAudio Audio** { get; }
Managed C++	public: __property **RecognitionAudio*** get_**Audio**();
JScript	public function get **Audio**() : **RecognitionAudio**

Property Value

System.Speech.Recognition.RecognitionAudio.

This property is read-only.

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Confidence Property

Note: This documentation is preliminary and is subject to change.

Gets confidence score information that expresses how confident the speech recognizer is that this is the correct token.

Definition

Visual Basic	Public ReadOnly Property **Confidence** As **Confidence**
C#	public **Confidence** **Confidence** { get; }
Managed C++	public: __property **Confidence** get_**Confidence**();
JScript	public function get **Confidence**() : **Confidence**

Property Value

System.Speech.Recognition.Confidence.

This property is read-only.

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PronunciationString Property

Note: This documentation is preliminary and is subject to change.

Gets the pronunciation of the token in string form.

Definition

Visual Basic	Public ReadOnly Property **PronunciationString** As **String**
C#	public **string** **PronunciationString** { get; }
Managed C++	public: __property **String*** get_**PronunciationString**();
JScript	public function get **PronunciationString**() : **String**

Property Value

System.String.

This property is read-only.

Remarks

String could also be returned in SAPI phone ids. In addition could do a conversion to IPA phones for consistency across languages (new feature work).

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RecognizerConfidence Property

Note: This documentation is preliminary and is subject to change.

Gets confidence score information that expresses how confident the speech recognizer is that this is the correct token.

Definition

Visual Basic	Public ReadOnly Property **RecognizerConfidence** As **Single**
C#	public **float RecognizerConfidence** { get; }
Managed C++	public: __property **float** get_**RecognizerConfidence**();
JScript	public function get **RecognizerConfidence**() : **float**

Property Value

System.Single.

This property is read-only.

Remarks

This value is not standardized across multiple speech Recognizers and can even change from version to version of a specific recognizer.

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Text Property

Note: This documentation is preliminary and is subject to change.

Gets the spoken text of the token.

Definition

Visual Basic	Public ReadOnly Property **Text** As **String**
C#	public **string Text** { get; }
Managed C++	public: __property **String*** get_**Text**();
JScript	public function get **Text**() : **String**

Property Value

System.String.

This property is read-only.

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SpokenTokenCollection Class

Note: This documentation is preliminary and is subject to change.

Represents a collection of recognized tokens.

Definition

Visual Basic	Public Class **SpokenTokenCollection** Inherits *ReadOnlyCollectionBase*
C#	public class **SpokenTokenCollection** : *ReadOnlyCollectionBase*
Managed C++	public __gc class **SpokenTokenCollection** : public *ReadOnlyCollectionBase*
JScript	public class **SpokenTokenCollection** extends *ReadOnlyCollectionBase*

Members Table

Inheritance Hierarchy

Object Leave

ReadOnlyCollectionBase Leave

SpokenTokenCollection

Class Information

Namespace	System.Speech.Recognition
Assembly	System.Speech (system.speech.dll)
Strong Name	System.Speech, Version=6.0.4044.0, Culture=neutral, PublicKeyToken=365143bb27e7ac8b

---

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GetAlternates Method

Note: This documentation is preliminary and is subject to change.

Gets a collection of alternates specified by a range of tokens in the result.

Overload List

public RecognitionPhraseAlternateCollection GetAlternates (Int32, Int32)
public RecognitionPhraseAlternateCollection GetAlternates (Int32, Int32, Int32)

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GetAudio Method

Note: This documentation is preliminary and is subject to change.

Gets the captured audio that corresponds to the specified range of tokens in this collection.

Definition

Visual Basic

```
Public Function GetAudio( _
   ByVal firstToken As Integer, _
   ByVal countOfTokens As Integer _
) As RecognitionAudio
```

C#

```
public RecognitionAudio GetAudio(
   int firstToken,
   int countOfTokens
);
```

Managed C++

```
public: RecognitionAudio* GetAudio(
   int firstToken,
   int countOfTokens
);
```

JScript

```
public function GetAudio(
   firstToken : int,
   countOfTokens : int
) : RecognitionAudio;
```

Parameters

firstToken **System.Int32**. The first token to consider
countOfTokens **System.Int32**. The number of tokens to consider

Return Value

System.Speech.Recognition.RecognitionAudio.

An instance of the RecognitionAudio class that represents the captured audio

---

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GetText Method

Note: This documentation is preliminary and is subject to change.

Gets the text that the specified range of tokens represents.

Definition

Visual Basic

```
Public Function GetText( _
   ByVal firstToken As Integer, _
   ByVal countOfTokens As Integer _
) As String
```

C#

```
public string GetText(
   int firstToken,
   int countOfTokens
);
```

Managed C++

```
public: String* GetText(
   int firstToken,
   int countOfTokens
);
```

JScript

```
public function GetText(
   firstToken : int,
   countOfTokens : int
) : String;
```

Parameters

firstToken **System.Int32**. The first token to consider
countOfTokens **System.Int32**. The number of tokens to consider

Return Value

System.String.

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Audio Property

Note: This documentation is preliminary and is subject to change.

Gets the captured audio that corresponds to this collection of recognized tokens.

Definition

```
Visual Basic  Public ReadOnly Property Audio As RecognitionAudio
C#            public RecognitionAudio Audio { get; }
Managed C++   public: __property RecognitionAudio* get_Audio();
JScript       public function get Audio() : RecognitionAudio
```

Property Value

System.Speech.Recognition.RecognitionAudio.

This property is read-only.

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Item Property

Note: This documentation is preliminary and is subject to change.

Gets the token at the specified position.

Definition

```
Visual Basic  Public ReadOnly Property Item( _
                ByVal index As Integer _
              ) As SpokenToken
C#            public SpokenToken this[
                int index
              ] { get; }
Managed C++   public: __property SpokenToken* get_Item(
                int index
              );
JScript       In JScript, you can use indexed properties, but you cannot define your own.
```

Property Value

System.Speech.Recognition.SpokenToken.

This property is read-only.

Parameters

index **System.Int32**.

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Text Property

Note: This documentation is preliminary and is subject to change.

Gets the text that this collection of token represents.

Definition

Visual Basic	Public ReadOnly Property **Text** As **String**
C#	public **string** **Text** { get; }
Managed C++	public: __property **String*** get_**Text**();
JScript	public function get **Text**() : **String**

Property Value

System.String.

This property is read-only.

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SystemRecognizer Class

Note: This documentation is preliminary and is subject to change.

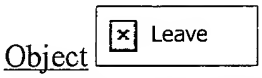
Represents the shared recognizer.

Definition

Visual Basic	Public Class **SystemRecognizer** Inherits *Object* Implements *IDisposable*, *IRecognizer*
C#	public class **SystemRecognizer** : *Object*, IDisposable, IRecognizer
Managed C++	public __gc class **SystemRecognizer** : public *Object*, IDisposable, IRecognizer
JScript	public class **SystemRecognizer** extends *Object* implements *IRecognizer*, *IDisposable*

Members Table

Inheritance Hierarchy



SystemRecognizer

Examples

The following code example creates a SystemRecognizer object and adds delegates to events.

```
private void SpeechRecognition_Load(object sender, EventArgs e)    {        //
```

Class Information

Namespace	System.Speech.Recognition
Assembly	System.Speech (system.speech.dll)
Strong Name	System.Speech, Version=6.0.4044.0, Culture=neutral, PublicKeyToken=365143bb27e7ac8b

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AdaptLanguageModel Method

Note: This documentation is preliminary and is subject to change.

Passes a specified string to the recognition engine for use in adapting the active language models.

Overload List

public Void AdaptLanguageModel (String)
public Void AdaptLanguageModel (String[])
public Void AdaptLanguageModel (String, String, AdaptationSettings, AdaptationRelevance)
public Void AdaptLanguageModel (String [], String, AdaptationSettings, AdaptationRelevance)

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Dispose Method

Note: This documentation is preliminary and is subject to change.

Releases the unmanaged resources used by the SystemRecognizer class.

Definition

Visual Basic	Public Sub **Dispose**()
C#	public **void Dispose**();
Managed C++	public: **void Dispose**();
JScript	public function **Dispose**() : **void**;

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EmulateRecognize Method

Note: This documentation is preliminary and is subject to change.

Simulates a speech recognition event by assuming that a specified string was spoken by the user.

Overload List

public Void EmulateRecognize (String)
public Void EmulateRecognize (String, CompareOptions)
public Void EmulateRecognize (String[])
public Void EmulateRecognize (String[], CompareOptions)

Examples

The following code example emulates the recognition of emulateTextBox.

```
private void EmulateButton_Click(object sender, EventArgs e)    {        if (em

Private Sub EmulateButton_Click(ByVal sender As Object, ByVal e As EventArgs) H
```

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InsertBookmark Method

Note: This documentation is preliminary and is subject to change.

Sets a bookmark at a specified stream position, and fires the Bookmark event.

Definition

Visual Basic	Public Sub **InsertBookmark**(_ ByVal *streamTimeToDoBookmark* As **TimeSpan**, _

```
                ByVal tag As Object _
            )
            public void InsertBookmark(
                TimeSpan streamTimeToDoBookmark,
C#              object tag
            );
            public: void InsertBookmark(
                TimeSpan streamTimeToDoBookmark,
Managed C++     Object* tag
            );
            public function InsertBookmark(
                streamTimeToDoBookmark : TimeSpan,
JScript          tag : Object
            ) : void;
```

Parameters

streamTimeToDoBookmark	**System.TimeSpan**.
tag	**System.Object**.

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InsertBookmarkAhead Method

Note: This documentation is preliminary and is subject to change.

Sets a bookmark at a specified amount of time ahead of the current audio position, and fires the Bookmark event.

Definition

```
            Public Sub InsertBookmarkAhead( _
                ByVal timeAheadToDoBookmark As TimeSpan, _
Visual Basic    ByVal tag As Object _
            )
            public void InsertBookmarkAhead(
                TimeSpan timeAheadToDoBookmark,
C#              object tag
            );
            public: void InsertBookmarkAhead(
                TimeSpan timeAheadToDoBookmark,
Managed C++     Object* tag
            );
            public function InsertBookmarkAhead(
JScript          timeAheadToDoBookmark : TimeSpan,
```

```
    tag : Object
) : void;
```

Parameters

timeAheadToDoBookmark	**System.TimeSpan**.
tag	**System.Object**.

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RequestUpdate Method

Note: This documentation is preliminary and is subject to change.

Requests an update as soon as the engine can accept it. The system will fire the Update event once the recognizer is ready to receive updates.

Overload List

public Void RequestUpdate ()
public Void RequestUpdate (Object)
public Void RequestUpdate (TimeSpan, Object)

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RequestUpdateAhead Method

Note: This documentation is preliminary and is subject to change.

Requests an update as soon as the engine can accept it. The system will fire the Update event once the recognizer is ready to receive updates.

Definition

Visual Basic

```
Public Sub RequestUpdateAhead( _
    ByVal timeAheadToDoUpdate As TimeSpan, _
    ByVal tag As Object _
)
```

C#

```
public void RequestUpdateAhead(
    TimeSpan timeAheadToDoUpdate,
    object tag
);
```

```
Managed C++
public: void RequestUpdateAhead(
   TimeSpan timeAheadToDoUpdate,
   Object* tag
);

JScript
public function RequestUpdateAhead(
   timeAheadToDoUpdate : TimeSpan,
   tag : Object
) : void;
```

Parameters

timeAheadToDoUpdate **System.TimeSpan**.
tag **System.Object**.

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SetState Method

Note: This documentation is preliminary and is subject to change.

Sets recognizer state.

Definition

```
Visual Basic
Public Sub SetState( _
   ByVal state As RecognizerState _
)

C#
public void SetState(
   RecognizerState state
);

Managed C++
public: void SetState(
   RecognizerState state
);

JScript
public function SetState(
   state : RecognizerState
) : void;
```

Parameters

state **System.Speech.Recognition.RecognizerState**. State to set

Remarks

Recognizer state is set to one of two values.

SPRECOSTATE.SPRST_ACTIVE_ALWAYS Indicates the audio is running regardless of the rule state. Even if there are no active rules, audio will still be read and passed to the engine. This state can be useful for applications if they want to receive volume level events, in order to display a VU-meter or similar.

SPRST_INACTIVE The engine and audio input are inactive and no audio is being read, even if there rules active. The audio device will be closed in this state. Normally an application should not set the state to SPRST_INACTIVE because when using the shared engine, recognition will be stopped for all applications, not just this one.

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WaitForUpdate Method

Note: This documentation is preliminary and is subject to change.

Raises the Update event, and blocks the recognizer until the Update event handler finishes.

Definition

Visual Basic	Public Sub **WaitForUpdate**()
C#	public **void WaitForUpdate**();
Managed C++	public: **void WaitForUpdate**();
JScript	public function **WaitForUpdate**() : **void**;

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ActiveCategory Property

Note: This documentation is preliminary and is subject to change.

Gets and sets the active recognizer category.

Definition

Visual Basic	Public Property **ActiveCategory** As **Category**
C#	public **Category ActiveCategory** { get; set; }
Managed C++	public: __property **Category*** get_**ActiveCategory**(); public: __property void set_**ActiveCategory**(**Category***);
JScript	public function get **ActiveCategory**() : **Category** public function set **ActiveCategory**(**Category**);

Property Value

System.Speech.Recognition.Category.

This property is read/write.

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Attributes Property

Note: This documentation is preliminary and is subject to change.

Gets the collection of attributes referenced by the recognizer.

Definition

Visual Basic	Public ReadOnly Property **Attributes** As **RecognizerAttributes**
C#	public **RecognizerAttributes** **Attributes** { get; }
Managed C++	public: __property **RecognizerAttributes*** get_**Attributes**();
JScript	public function get **Attributes**() : **RecognizerAttributes**

Property Value

System.Speech.Recognition.RecognizerAttributes.

This property is read-only.

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AudioContent Property

Note: This documentation is preliminary and is subject to change.

Returns the content of the audio stream.

Definition

Visual Basic	Public ReadOnly Property **AudioContent** As **AudioContent**
C#	public **AudioContent** **AudioContent** { get; }
Managed C++	public: __property **AudioContent** get_**AudioContent**();
JScript	public function get **AudioContent**() : **AudioContent**

Property Value

System.Speech.Recognition.AudioContent.

This property is read-only.

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AudioPosition Property

Note: This documentation is preliminary and is subject to change.

Gets the current read or write position of the stream or device in bytes.

Definition

Visual Basic	Public ReadOnly Property **AudioPosition** As **TimeSpan**
C#	public **TimeSpan** **AudioPosition** { get; }
Managed C++	public: __property **TimeSpan** get_**AudioPosition**();
JScript	public function get **AudioPosition**() : **TimeSpan**

Property Value

System.TimeSpan.

This property is read-only.

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EnableRejection Property

Note: This documentation is preliminary and is subject to change.

Gets a value that specifies whether the recognizer splits recognitions into those with high confidence that raise a Recognition event, and those with low confidence that raise a RejectedRecognition event. True by default. If set to false, all recognitions fire a Recognition event.

Definition

Visual Basic	Public Property **EnableRejection** As **Boolean**
C#	public **bool** **EnableRejection** { get; set; }
Managed C++	public: __property **bool** get_**EnableRejection**(); public: __property void set_**EnableRejection**(**bool**);
JScript	public function get **EnableRejection**() : **boolean**

public function set **EnableRejection**(boolean);

Property Value

System.Boolean.

This property is read/write.

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Grammars Property

Note: This documentation is preliminary and is subject to change.

Gets the collection of grammars referenced by the recognizer.

Definition

Visual Basic	Public ReadOnly Property **Grammars** As **GrammarCollection**
C#	public **GrammarCollection** **Grammars** { get; }
Managed C++	public: __property **GrammarCollection*** get_**Grammars**();
JScript	public function get **Grammars**() : **GrammarCollection**

Property Value

System.Speech.Recognition.GrammarCollection.

This property is read-only.

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IsActive Property

Note: This documentation is preliminary and is subject to change.

Gets or sets a value that specifies whether the recognizer is active. Defaults to true.

Definition

Visual Basic	Public Property **IsActive** As **Boolean**
C#	public **bool** **IsActive** { get; set; }
Managed C++	public: __property **bool** get_**IsActive**();

JScript	public: __property void set_**IsActive**(**bool**); public function get **IsActive**() : **boolean** public function set **IsActive**(**boolean**);

Property Value

System.Boolean.

This property is read/write.

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Properties Property

Note: This documentation is preliminary and is subject to change.

Gets the collection of properties referenced by the recognizer.

Definition

Visual Basic	Public ReadOnly Property **Properties** As **RecognizerProperties**
C#	public **RecognizerProperties** **Properties** { get; }
Managed C++	public: __property **RecognizerProperties*** get_**Properties**();
JScript	public function get **Properties**() : **RecognizerProperties**

Property Value

System.Speech.Recognition.RecognizerProperties.

This property is read-only.

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Recognizer Property

Note: This documentation is preliminary and is subject to change.

Definition

Visual Basic	Public Shared ReadOnly Property **Recognizer** As **SystemRecognizer**
C#	public static **SystemRecognizer** **Recognizer** { get; }
Managed C++	public: __property static **SystemRecognizer*** get_**Recognizer**();

JScript public static function get **Recognizer**() : **SystemRecognizer**

Property Value

System.Speech.Recognition.SystemRecognizer.

This property is read-only.

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RecognizerPosition Property

Note: This documentation is preliminary and is subject to change.

Gets the current stream position the engine has recognized to. Stream positions are measured in bytes. This value can be used to check the engine's progress using the audio data.

Definition

Visual Basic Public ReadOnly Property **RecognizerPosition** As **TimeSpan**
C# public **TimeSpan** **RecognizerPosition** { get; }
Managed C++ public: __property **TimeSpan** get_**RecognizerPosition**();
JScript public function get **RecognizerPosition**() : **TimeSpan**

Property Value

System.TimeSpan.

This property is read-only.

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State Property

Note: This documentation is preliminary and is subject to change.

Gets the current state of the recognizer.

Definition

Visual Basic Public ReadOnly Property **State** As **RecognizerState**
C# public **RecognizerState** **State** { get; }

Managed C++	public: __property **RecognizerState** get_**State**();
JScript	public function get **State**() : **RecognizerState**

Property Value

System.Speech.Recognition.RecognizerState.

This property is read-only.

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ActiveCategoryChanged Event

Note: This documentation is preliminary and is subject to change.

Occurs when the active category is changed.

Definition

Visual Basic	Public Event **ActiveCategoryChanged** As *ActiveCategoryChangedEventHandler*
C#	public event *ActiveCategoryChangedEventHandler* **ActiveCategoryChanged**;
Managed C++	public: __event **ActiveCategoryChanged**;
JScript	In JScript, you can use events, but you cannot define your own.

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AudioContentChanged Event

Note: This documentation is preliminary and is subject to change.

Occurs when the type of signal in the audio input changed.

Definition

Visual Basic	Public Event **AudioContentChanged** As *AudioContentChangedEventHandler*
C#	public event *AudioContentChangedEventHandler* **AudioContentChanged**;
Managed C++	public: __event **AudioContentChanged**;

JScript In JScript, you can use events, but you cannot define your own.

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Bookmark Event

Note: This documentation is preliminary and is subject to change.

Occurs when a bookmark is reached.

Definition

Visual Basic Public Event **Bookmark** As *BookmarkEventHandler*
C# public event *BookmarkEventHandler* **Bookmark**;
Managed C++ public: __event **Bookmark**;
JScript In JScript, you can use events, but you cannot define your own.

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Hypothesis Event

Note: This documentation is preliminary and is subject to change.

Occurs when a spoken phrase is partially recognized.

Definition

Visual Basic Public Event **Hypothesis** As *RecognitionEventHandler*
C# public event *RecognitionEventHandler* **Hypothesis**;
Managed C++ public: __event **Hypothesis**;
JScript In JScript, you can use events, but you cannot define your own.

Examples

This example handles the Eecognition event and displays the hypothesized result.

```
private void Recognizer_Hypothesis(object sender, RecognitionEventArgs e)    {

Private Sub Recognizer_Hypothesis(ByVal sender As Object, ByVal e As Recognitio
```

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InterferenceDetected Event

Note: This documentation is preliminary and is subject to change.

Occurs when the speech recognition engine encounters interference in the input audio stream preventing an optimal speech recognition experience.

Definition

Visual Basic	Public Event **InterferenceDetected** As *InterferenceEventHandler*
C#	public event *InterferenceEventHandler* **InterferenceDetected;**
Managed C++	public: __event **InterferenceDetected;**
JScript	In JScript, you can use events, but you cannot define your own.

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NoRecognition Event

Note: This documentation is preliminary and is subject to change.

Occurs when a spoken phrase is not recognized.

Definition

Visual Basic	Public Event **NoRecognition** As *RecognitionEventHandler*
C#	public event *RecognitionEventHandler* **NoRecognition;**
Managed C++	public: __event **NoRecognition;**
JScript	In JScript, you can use events, but you cannot define your own.

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Recognition Event

Note: This documentation is preliminary and is subject to change.

Occurs when a spoken phrase is successfully recognized.

Definition

Visual Basic	Public Event **Recognition** As *RecognitionEventHandler*

C#	public event *RecognitionEventHandler* **Recognition**;
Managed C++	public: __event **Recognition**;
JScript	In JScript, you can use events, but you cannot define your own.

Examples

This example displays the recognition result and updates the semantics and alternates.

```
private void Recognizer_Recognition(object sender, RecognitionEventArgs e
```

This sample handles the recognition event.

```
Private Sub Recognizer_Recognition(ByVal sender As Object, ByVal e As Reco
```

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RecognizeProgressChanged Event

Note: This documentation is preliminary and is subject to change.

Occurs when the input audio volume level changes.

Definition

Visual Basic	Public Event **RecognizeProgressChanged** As *RecognizeProgressChangedEventHandler*
C#	public event *RecognizeProgressChangedEventHandler* **RecognizeProgressChanged**;
Managed C++	public: __event **RecognizeProgressChanged**;
JScript	In JScript, you can use events, but you cannot define your own.

Examples

This example updates the audio level meter when the recognition progress has been updated.

```
private void Recognizer_RecognizeProgressChanged(object sender, Recognize
```

```
Private Sub Recognizer_RecognizeProgressChanged(ByVal sender As Object,
```

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RecognizerStateChanged Event

Note: This documentation is preliminary and is subject to change.

Occurs when recognition starts, or stops; or when recognition is canceled, paused, or resumed.

Definition

Visual Basic	Public Event **RecognizerStateChanged** As *RecognizerStateChangedEventHandler*
C#	public event *RecognizerStateChangedEventHandler* **RecognizerStateChanged;**
Managed C++	public: __event **RecognizerStateChanged;**
JScript	In JScript, you can use events, but you cannot define your own.

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RejectedRecognition Event

Note: This documentation is preliminary and is subject to change.

Occurs when a spoken phrase is recognized with low confidence.

Definition

Visual Basic	Public Event **RejectedRecognition** As *RecognitionEventHandler*
C#	public event *RecognitionEventHandler* **RejectedRecognition;**
Managed C++	public: __event **RejectedRecognition;**
JScript	In JScript, you can use events, but you cannot define your own.

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Update Event

Note: This documentation is preliminary and is subject to change.

Occurs when the RequestUpdate and related methods are used to request that the recognition engine pause to allow changes to grammars or other changes to be made.

Definition

Visual Basic	Public Event **Update** As *UpdateEventHandler*

C#	public event *UpdateEventHandler* **Update**;
Managed C++	public: __event **Update**;
JScript	In JScript, you can use events, but you cannot define your own.

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UpdateEventArgs Class

Note: This documentation is preliminary and is subject to change.

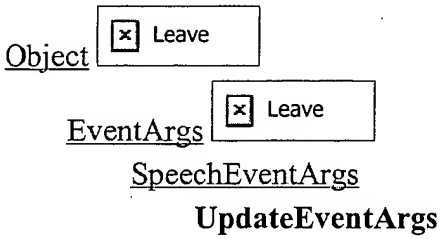
Provides data for the Update event.

Definition

Visual Basic	Public Class **UpdateEventArgs** Inherits *SpeechEventArgs*
C#	public class **UpdateEventArgs** : *SpeechEventArgs*
Managed C++	public __gc class **UpdateEventArgs** : public *SpeechEventArgs*
JScript	public class **UpdateEventArgs** extends *SpeechEventArgs*

Members Table

Inheritance Hierarchy



Class Information

Namespace	System.Speech.Recognition
Assembly	System.Speech (system.speech.dll)
Strong Name	System.Speech, Version=6.0.4044.0, Culture=neutral, PublicKeyToken=365143bb27e7ac8b

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UpdateEventArgs Method

Note: This documentation is preliminary and is subject to change.

Initializes a new instance of the UpdateEventArgs class.

Definition

Visual Basic
```
Public Sub UpdateEventArgs( _
   ByVal audioPosition As TimeSpan, _
   ByVal tag As Object _
)
```

C#
```
public UpdateEventArgs(
   TimeSpan audioPosition,
   object tag
);
```

Managed C++
```
public: UpdateEventArgs(
   TimeSpan audioPosition,
   Object* tag
);
```

JScript
```
public function UpdateEventArgs(
   audioPosition : TimeSpan,
   tag : Object
);
```

Parameters

audioPosition **System.TimeSpan**. Placeholder
tag **System.Object**. Application supplied object reference.

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Tag Property

Note: This documentation is preliminary and is subject to change.

Gets an application-supplied object reference.

Definition

Visual Basic
```
Public ReadOnly Property Tag As Object
```

C#
```
public object Tag { get; }
```

Managed C++
```
public: __property Object* get_Tag();
```

JScript
```
public function get Tag() : Object
```

Property Value

System.Object.

This property is read-only.

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IRecognizer Interface

Note: This documentation is preliminary and is subject to change.

Provides an interface representing a speech recognizer.

Definition

Visual Basic	Public Interface **IRecognizer**
C#	public interface **IRecognizer**
Managed C++	public __gc __interface **IRecognizer**
JScript	public interface **IRecognizer**

Members Table

Interface Information

Namespace	System.Speech.Recognition
Assembly	System.Speech (system.speech.dll)
Strong Name	System.Speech, Version=6.0.4044.0, Culture=neutral, PublicKeyToken=365143bb27e7ac8b

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AdaptLanguageModel Method

Note: This documentation is preliminary and is subject to change.

Passes a specified string to the recognition engine for use in adapting the active language models.

Overload List

public Void AdaptLanguageModel (String)
public Void AdaptLanguageModel (String[])
public Void AdaptLanguageModel (String, String, AdaptationSettings, AdaptationRelevance)
public Void AdaptLanguageModel (String

[], String, AdaptationSettings, AdaptationRelevance)

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EmulateRecognize Method

Note: This documentation is preliminary and is subject to change.

Simulates a speech recognition event by assuming that a specified string was spoken by the user.

Overload List

public Void EmulateRecognize (String)
public Void EmulateRecognize (String, CompareOptions)
public Void EmulateRecognize (String[])
public Void EmulateRecognize (String[], CompareOptions)

Remarks

Synchronous recognition emulation. The appropriate events are still raise.

Synchronous recognition emulation. The appropriate events are still raise.

Synchronous recognition emulation. The appropriate events are still raise.

Synchronous recognition emulation. The appropriate events are still raise.

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InsertBookmark Method

Note: This documentation is preliminary and is subject to change.

Sets a bookmark at a specified stream position, and fires the Bookmark event.

Definition

Visual Basic

```
Public Sub InsertBookmark( _
   ByVal streamTimeToDoBookmark As TimeSpan, _
   ByVal tag As Object _
)

public void InsertBookmark(
```

```
C#
    TimeSpan streamTimeToDoBookmark,
    object tag
);
Managed C++
public: void InsertBookmark(
    TimeSpan streamTimeToDoBookmark,
    Object* tag
);
JScript
public function InsertBookmark(
    streamTimeToDoBookmark : TimeSpan,
    tag : Object
) : void;
```

Parameters

streamTimeToDoBookmark	**System.TimeSpan**.
tag	**System.Object**.

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InsertBookmarkAhead Method

Note: This documentation is preliminary and is subject to change.

Sets a bookmark at a specified amount of time ahead of the current audio position, and fires the Bookmark event.

Definition

```
Visual Basic
Public Sub InsertBookmarkAhead( _
    ByVal timeAheadToDoBookmark As TimeSpan, _
    ByVal tag As Object _
)
C#
public void InsertBookmarkAhead(
    TimeSpan timeAheadToDoBookmark,
    object tag
);
Managed C++
public: void InsertBookmarkAhead(
    TimeSpan timeAheadToDoBookmark,
    Object* tag
);
JScript
public function InsertBookmarkAhead(
    timeAheadToDoBookmark : TimeSpan,
    tag : Object
) : void;
```

Parameters

timeAheadToDoBookmark	**System.TimeSpan**.
tag	**System.Object**.

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RequestUpdate Method

Note: This documentation is preliminary and is subject to change.

Requests an update as soon as the engine can accept it. The system will fire the Update event once the recognizer is ready to receive updates.

Overload List

public Void RequestUpdate ()
public Void RequestUpdate (Object)
public Void RequestUpdate (TimeSpan, Object)

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RequestUpdateAhead Method

Note: This documentation is preliminary and is subject to change.

Requests an update when the engine reaches a position a specified amount of time ahead of the current audio position. If the time ahead is zero, then the engine pauses as soon as it recognizes speech up to the current audio position.

Definition

Visual Basic

```
Public Sub RequestUpdateAhead( _
   ByVal timeAheadToDoUpdate As TimeSpan, _
   ByVal tag As Object _
)
```

C#

```
public void RequestUpdateAhead(
   TimeSpan timeAheadToDoUpdate,
   object tag
);
```

Managed C++

```
public: void RequestUpdateAhead(
   TimeSpan timeAheadToDoUpdate,
```

```
    Object* tag
);
public function RequestUpdateAhead(
    timeAheadToDoUpdate : TimeSpan,
    tag : Object
) : void;
```

JScript

Parameters

timeAheadToDoUpdate	**System.TimeSpan**. ahead of current audio position that the engine will reach before doing the update.
tag	**System.Object**. Object that will be passed to the delegate when called. This can be a reference to any object in the application.

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WaitForUpdate Method

Note: This documentation is preliminary and is subject to change.

Raises the Update event, and blocks the recognizer until the Update event handler finishes.

Definition

Visual Basic	Public Sub **WaitForUpdate**()
C#	public **void WaitForUpdate**();
Managed C++	public: **void WaitForUpdate**();
JScript	public function **WaitForUpdate**() : **void**;

Remarks

This method will block until the engine is ready to be updated.

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Attributes Property

Note: This documentation is preliminary and is subject to change.

Gets the recognizer attributes of the underlying recognizer. Read only.

Definition

Visual Basic	Public ReadOnly Property **Attributes** As **RecognizerAttributes**
C#	public **RecognizerAttributes** **Attributes** { get; }
Managed C++	public: __property **RecognizerAttributes*** get_**Attributes**();
JScript	public function get **Attributes**() : **RecognizerAttributes**

Property Value

System.Speech.Recognition.RecognizerAttributes.

This property is read-only.

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AudioContent Property

Note: This documentation is preliminary and is subject to change.

Returns the content of the audio stream.

Definition

Visual Basic	Public ReadOnly Property **AudioContent** As **AudioContent**
C#	public **AudioContent** **AudioContent** { get; }
Managed C++	public: __property **AudioContent** get_**AudioContent**();
JScript	public function get **AudioContent**() : **AudioContent**

Property Value

System.Speech.Recognition.AudioContent.

This property is read-only.

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EnableRejection Property

Note: This documentation is preliminary and is subject to change.

Gets a value that specifies whether the recognizer splits recognitions into those with high confidence that raise a Recognition event, and those with low confidence that raise a RejectedRecognition event. True by default. If set to false, all recognitions fire a Recognition event.

Definition

Visual Basic	Public Property **EnableRejection** As **Boolean**
C#	public **bool EnableRejection** { get; set; }
Managed C++	public: __property **bool** get_**EnableRejection**(); public: __property void set_**EnableRejection**(**bool**);
JScript	public function get **EnableRejection**() : **boolean** public function set **EnableRejection**(**boolean**);

Property Value

System.Boolean.

This property is read/write.

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Grammars Property

Note: This documentation is preliminary and is subject to change.

Gets the collection of grammars attached to this recognizer.

Definition

Visual Basic	Public ReadOnly Property **Grammars** As **GrammarCollection**
C#	public **GrammarCollection Grammars** { get; }
Managed C++	public: __property **GrammarCollection*** get_**Grammars**();
JScript	public function get **Grammars**() : **GrammarCollection**

Property Value

System.Speech.Recognition.GrammarCollection.

This property is read-only.

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IsActive Property

Note: This documentation is preliminary and is subject to change.

Gets or sets a value that specifies whether the recognizer is active. Defaults to true.

Definition

Visual Basic	Public Property **IsActive** As **Boolean**
C#	public **bool IsActive** { get; set; }
Managed C++	public: __property **bool** get_**IsActive**(); public: __property void set_**IsActive**(**bool**);
JScript	public function get **IsActive**() : **boolean** public function set **IsActive**(**boolean**);

Property Value

System.Boolean.

This property is read/write.

Remarks

For a top level rule to be recognized, it must be active, it must be housed in an active grammar, and that grammar must be housed in a recognizer that is active. If any one of these three conditions are not met, the rule cannot be recognized. Setting this method is used in the shared case to activate and deactivate a set of grammars simultaneously.

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Properties Property

Note: This documentation is preliminary and is subject to change.

Gets the properties of this instance of the recognizer.

Definition

Visual Basic	Public ReadOnly Property **Properties** As **RecognizerProperties**
C#	public **RecognizerProperties Properties** { get; }
Managed C++	public: __property **RecognizerProperties*** get_**Properties**();
JScript	public function get **Properties**() : **RecognizerProperties**

Property Value

System.Speech.Recognition.RecognizerProperties.

This property is read-only.

Remarks

Take care when setting the properties when using the Shared Recognizer as these values affect all running Speech applications that are also using the Shared Recognizer.

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State Property

Note: This documentation is preliminary and is subject to change.

Gets the current state of the recognizer.

Definition

Visual Basic	Public ReadOnly Property **State** As **RecognizerState**
C#	public **RecognizerState** **State** { get; }
Managed C++	public: __property **RecognizerState** get_**State**();
JScript	public function get **State**() : **RecognizerState**

Property Value

System.Speech.Recognition.RecognizerState.

This property is read-only.

Remarks

State cannot be set directly. Use the Recognize(), RecognizeAsync(), StopRecognize(), Pause(), or Resume() methods instead.

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AudioContentChanged Event

Note: This documentation is preliminary and is subject to change.

Occurs when the type of signal in the audio input changed.

Definition

Visual Basic	Public Event **AudioContentChanged** As *AudioContentChangedEventHandler*

C#	public event *AudioContentChangedEventHandler* **AudioContentChanged;**
Managed C++	public: __event **AudioContentChanged;**
JScript	In JScript, you can use events, but you cannot define your own.

Remarks

Applications may handle this event to provide user feedback that speech recognition is occurring. This event encompasses the SALT SpeechDetected event and multiple audio state related events from SAPI (StreamStart, SoundStart, PhraseStart, SoundEnd, StreamEnd).

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Bookmark Event

Note: This documentation is preliminary and is subject to change.

Occurs when a bookmark is reached.

Definition

Visual Basic	Public Event **Bookmark** As *BookmarkEventHandler*
C#	public event *BookmarkEventHandler* **Bookmark;**
Managed C++	public: __event **Bookmark;**
JScript	In JScript, you can use events, but you cannot define your own.

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Hypothesis Event

Note: This documentation is preliminary and is subject to change.

Occurs when a spoken phrase is partially recognized.

Definition

Visual Basic	Public Event **Hypothesis** As *RecognitionEventHandler*
C#	public event *RecognitionEventHandler* **Hypothesis;**
Managed C++	public: __event **Hypothesis;**
JScript	In JScript, you can use events, but you cannot define your own.

Remarks

The application may use this event to display intermediate recognition results to the user.

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InterferenceDetected Event

Note: This documentation is preliminary and is subject to change.

Occurs when the speech recognition engine encounters interference in the input audio stream preventing an optimal speech recognition experience.

Definition

Visual Basic	Public Event **InterferenceDetected** As *InterferenceEventHandler*
C#	public event *InterferenceEventHandler* **InterferenceDetected;**
Managed C++	public: __event **InterferenceDetected;**
JScript	In JScript, you can use events, but you cannot define your own.

Remarks

The application may handle this event to provide feedback to the user to correct the interference. Use the InterferenceEventArg parameter to access the interference type .

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NoRecognition Event

Note: This documentation is preliminary and is subject to change.

Occurs when a spoken phrase is not recognized.

Definition

Visual Basic	Public Event **NoRecognition** As *RecognitionEventHandler*
C#	public event *RecognitionEventHandler* **NoRecognition;**
Managed C++	public: __event **NoRecognition;**
JScript	In JScript, you can use events, but you cannot define your own.

Remarks

Use this event to indicate to the user that the spoken phrase was unrecognized. The Result object in the event args will be null.

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Recognition Event

Note: This documentation is preliminary and is subject to change.

Occurs when a spoken phrase is successfully recognized.

Definition

Visual Basic	Public Event **Recognition** As *RecognitionEventHandler*
C#	public event *RecognitionEventHandler* **Recognition**;
Managed C++	public: __event **Recognition**;
JScript	In JScript, you can use events, but you cannot define your own.

Remarks

Use the RecognitionEventArgs parameter to return the audio position and recognition result.

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RecognizeProgressChanged Event

Note: This documentation is preliminary and is subject to change.

Occurs when the input audio volume level changes.

Definition

Visual Basic	Public Event **RecognizeProgressChanged** As *RecognizeProgressChangedEventHandler*
C#	public event *RecognizeProgressChangedEventHandler* **RecognizeProgressChanged**;
Managed C++	public: __event **RecognizeProgressChanged**;
JScript	In JScript, you can use events, but you cannot define your own.

Remarks

This event can be used to dynamically update a VU (volume unit) meter for user feedback without implementing logic to update the VU meter every fixed interval. Use the Recognizer.AudioLevel property to get current audio volume level.

Consider limiting the event so it is raised no more than 10 times per second. Furthermore, no additional RecognizeProgressChanged event is raised until the detect Recognizer.get_AudioLevel event is been processed.

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RecognizerStateChanged Event

Note: This documentation is preliminary and is subject to change.

Occurs when recognition starts, or stops; or when recognition is canceled, paused, or resumed.

Definition

Visual Basic	Public Event **RecognizerStateChanged** As *RecognizerStateChangedEventHandler*
C#	public event *RecognizerStateChangedEventHandler* **RecognizerStateChanged**;
Managed C++	public: __event **RecognizerStateChanged**;
JScript	In JScript, you can use events, but you cannot define your own.

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RejectedRecognition Event

Note: This documentation is preliminary and is subject to change.

Occurs when a spoken phrase is recognized with low confidence.

Definition

Visual Basic	Public Event **RejectedRecognition** As *RecognitionEventHandler*
C#	public event *RecognitionEventHandler* **RejectedRecognition**;
Managed C++	public: __event **RejectedRecognition**;
JScript	In JScript, you can use events, but you cannot define your own.

Remarks

The application should confirm the recognition result with the user before processing this event as a successful recognition. Use the RecognitionEventArgs parameter to return the audio position and recognition result.

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Update Event

Note: This documentation is preliminary and is subject to change.

Occurs when the RequestUpdate and related methods are used to request that the recognition engine pause to allow changes to grammars or other changes to be made.

Definition

Visual Basic	Public Event **Update** As *UpdateEventHandler*
C#	public event *UpdateEventHandler* **Update**;
Managed C++	public: __event **Update**;
JScript	In JScript, you can use events, but you cannot define your own.

Remarks

The Update event is raised to allow the application to make the necessary changes. After the application returns from the event the recognition engine resumes processing. While the event is being raised recognition will not occur, but input audio will continue to be collected and stored by the recognizer in an audio buffer. After the application returns from the event the buffered audio data will be processed ensuring that no real-time audio data is lost and that the user experience is not interrupted.

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AdaptationRelevance Enumeration

Note: This documentation is preliminary and is subject to change.

Specifies an estimate of the language model data relevance.

Definition

Visual Basic	Public Enum **AdaptationRelevance**
C#	public enum **AdaptationRelevance**
Managed C++	__value public enum **AdaptationRelevance**
JScript	public enum **AdaptationRelevance**

Constants

Constant Name	Description
Unknown	The application has no information on relevance. Probably the same as Low relevance, but specified separately.
Low	Language model data relevance is low. Text data might be arbitrary documents, and not be representative of the user or topic.
Medium	Language model data relevance is medium. Text data has additional relevance, documents are previously written by user.
High	Language model data relevance is high. Data is directly selected by the user or application for this topic.

Enumeration Information

Namespace	System.Speech.Recognition
Assembly	System.Speech (system.speech.dll)
Strong Name	System.Speech, Version=6.0.4044.0, Culture=neutral, PublicKeyToken=365143bb27e7ac8b

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AdaptationSettings Enumeration

Note: This documentation is preliminary and is subject to change.

Specifies the options to use with the AdaptLanguageModel method to control the language model adaptation process.

Definition

Visual Basic	Public Enum **AdaptationSettings**
C#	public enum **AdaptationSettings**
Managed C++	__value public enum **AdaptationSettings**
JScript	public enum **AdaptationSettings**

Constants

Constant Name	Description
Default	Default engine settings.
AdaptCurrentRecognizer	Perform adaptation for this recognizer object only, and do not store the result of the adaptation after the recognizer is closed.
	Persistently store the result of the adaptation in the RecoProfile.

AdaptRecognizerProfile	This flag can be combined with the AdaptCurrentRecognizer flag.
Immediate	Immediately store the result of the adaptation. Sometimes engines will wait until a certain amount of data is obtained before adapting. This makes the adaptation occur immediately.

Enumeration Information

Namespace	System.Speech.Recognition
Assembly	System.Speech (system.speech.dll)
Strong Name	System.Speech, Version=6.0.4044.0, Culture=neutral, PublicKeyToken=365143bb27e7ac8b

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AudioContent Enumeration

Note: This documentation is preliminary and is subject to change.

Specifies the current audio state.

Definition

Visual Basic	Public Enum **AudioContent**
C#	public enum **AudioContent**
Managed C++	__value public enum **AudioContent**
JScript	public enum **AudioContent**

Constants

Constant Name	Description
Stopped	The audio input is stopped.
Silence	The audio input contains silence.
Sound	The audio input contains a non-silence signal, but is not identifiable as speech.
Speech	The audio input contains a speech signal.

Enumeration Information

Namespace	System.Speech.Recognition
Assembly	System.Speech (system.speech.dll)
Strong	System.Speech, Version=6.0.4044.0, Culture=neutral,

Name	PublicKeyToken=365143bb27e7ac8b

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Confidence Enumeration

Note: This documentation is preliminary and is subject to change.

Specifies the various high level confidence values possible for speech recognition.

Definition

Visual Basic	Public Enum **Confidence**
C#	public enum **Confidence**
Managed C++	__value public enum **Confidence**
JScript	public enum **Confidence**

Constants

Constant Name	Description
High	Indicates that the speech recognizer has high confidence that the audio was processed correctly. When an application discovers that something has a high level of confidence, it's very likely that the user did in fact say what was recognized.
Normal	Indicates that the speech recognizer has a normal level of confidence that the audio was processed correctly.
Low	Indicates that the speech recognizer has a low level of confidence that the audio was processed correctly. This means that it is likely that that the recognition result is not what the user actually said.

Enumeration Information

Namespace	System.Speech.Recognition
Assembly	System.Speech (system.speech.dll)
Strong Name	System.Speech, Version=6.0.4044.0, Culture=neutral, PublicKeyToken=365143bb27e7ac8b

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InterferenceType Enumeration

Note: This documentation is preliminary and is subject to change.

Specifies the types of interference in the audio input preventing an optimal speech recognition experience.

Definition

Visual Basic	Public Enum **InterferenceType**
C#	public enum **InterferenceType**
Managed C++	__value public enum **InterferenceType**
JScript	public enum **InterferenceType**

Constants

Constant Name	Description
TooNoisy	The audio input is too noisy for accurate recognition of the input phrase.
NoSignal	The audio input does not contain any audio signal (flat line).
TooLoud	The audio input is too loud for optimal recognition, resulting in clipping of the signal.
TooSoft	The audio input is too soft, resulting in sub-optimal recognition of the input phrase.
TooFast	The audio input is too fast for optimal recognition.
TooSlow	The audio input is too slow for optimal recognition.

Enumeration Information

Namespace	System.Speech.Recognition
Assembly	System.Speech (system.speech.dll)
Strong Name	System.Speech, Version=6.0.4044.0, Culture=neutral, PublicKeyToken=365143bb27e7ac8b

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LeadingSpace Enumeration

Note: This documentation is preliminary and is subject to change.

Specifies how to handle leading space when incorporating RecognitionResult text into surrounding text.

Definition

Visual Basic	Public Enum **LeadingSpace**

C#	public enum **LeadingSpace**
Managed C++	__value public enum **LeadingSpace**
JScript	public enum **LeadingSpace**

Constants

Constant Name	Description
ConsumeLeadingSpaces	Indicates that the application will consume spaces before the RecognitionResult that is being incorporated into surrounding text.
NoLeadingSpaces	Indicates that the application will not insert additional space before the RecognitionResult that is being incorporated into surrounding text.
OneLeadingSpace	Indicates that the application will inject a single additional space before the RecognitionResult.
TwoLeadingSpaces	Indicates that the application will inject two additional spaces before the RecognitionResult.

Enumeration Information

Namespace	System.Speech.Recognition
Assembly	System.Speech (system.speech.dll)
Strong Name	System.Speech, Version=6.0.4044.0, Culture=neutral, PublicKeyToken=365143bb27e7ac8b

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RecognizeMode Enumeration

Note: This documentation is preliminary and is subject to change.

Specifies the recognition mode.

Definition

Visual Basic	Public Enum **RecognizeMode**
C#	public enum **RecognizeMode**
Managed C++	__value public enum **RecognizeMode**
JScript	public enum **RecognizeMode**

Constants

Constant Name	Description

Automatic	The recognition mode is automatic.
Multiple	The recognition mode is multiple.

Enumeration Information

Namespace	System.Speech.Recognition
Assembly	System.Speech (system.speech.dll)
Strong Name	System.Speech, Version=6.0.4044.0, Culture=neutral, PublicKeyToken=365143bb27e7ac8b

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RecognizerState Enumeration

Note: This documentation is preliminary and is subject to change.

Specifies the current state of the recognizer.

Definition

Visual Basic	Public Enum **RecognizerState**
C#	public enum **RecognizerState**
Managed C++	__value public enum **RecognizerState**
JScript	public enum **RecognizerState**

Constants

Constant Name	Description
Stopped	The recognizer is currently stopped, and is not listening.
Paused	The recognizer is currently paused, with input audio continuing to be queued.
Listening	The recognizer is currently listening.
Sleeping	The recognizer is currently asleep. It will wake up if the user says "Wake up"

Enumeration Information

Namespace	System.Speech.Recognition
Assembly	System.Speech (system.speech.dll)
Strong Name	System.Speech, Version=6.0.4044.0, Culture=neutral, PublicKeyToken=365143bb27e7ac8b

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ResultType Enumeration

Note: This documentation is preliminary and is subject to change.

Specifies the types of recognition result that can be sent.

Definition

Visual Basic	Public Enum **ResultType**
C#	public enum **ResultType**
Managed C++	__value public enum **ResultType**
JScript	public enum **ResultType**

Constants

Constant Name	Description
Hypothesis	A trecoignition result which is a hypothesis, or a provisional match of part of the input speech.
Recognition	A recognition result that the engine recommends can be acted on.
RejectedRecognition	A recognition result that has low confidence and thus the engine does not recommend acting on without confirmation from the user.
NoRecognition	The recognizer finished processing the speech but was unable to recognize anything.
RecognitionForOtherRecognizer	The engine recognized speech for a different application, and the full result was sent there.
RecognitionTimeout	Recognition terminated due to initial silence or babble timeout.

Examples

The following code example displays the recognition result and updates the semantics and alternates.

```
private void Recognizer_Recognition(object sender, RecognitionEventArgs e

 Private Sub ProcessRecognition(ByVal e As RecognitionEventArgs)       ' D
```

Enumeration Information

Namespace System.Speech.Recognition

Assembly	System.Speech (system.speech.dll)
Strong Name	System.Speech, Version=6.0.4044.0, Culture=neutral, PublicKeyToken=365143bb27e7ac8b

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TrailingSpace Enumeration

Note: This documentation is preliminary and is subject to change.

Specifies how to handle trailing space when incorporating the RecognitionResult's text into surrounding text.

Definition

Visual Basic	Public Enum **TrailingSpace**
C#	public enum **TrailingSpace**
Managed C++	__value public enum **TrailingSpace**
JScript	public enum **TrailingSpace**

Constants

Constant Name	Description
ConsumeTrailingSpaces	Indicates that the application will consume spaces after the RecognitionResult that is being incorporated into surrounding text.
NoTrailingSpaces	Indicates that the application will not inject any additional spaces after the RecognitionResult that is being incorporated into surrounding text.
OneTrailingSpace	Indicates that the application will inject a single additional space after the RecognitionResult that is being incorporated into surrounding text.
TwoTrailingSpaces	Indicates that the application will inject two additional spaces after the RecognitionResult that is being incorporated into surrounding text.

Enumeration Information

Namespace	System.Speech.Recognition
Assembly	System.Speech (system.speech.dll)
Strong Name	System.Speech, Version=6.0.4044.0, Culture=neutral, PublicKeyToken=365143bb27e7ac8b

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DictationTopic Structure

Note: This documentation is preliminary and is subject to change.

Represents a dictation topic.

Definition

Visual Basic	Public Structure DictationTopic
C#	public struct DictationTopic
Managed C++	public __value struct DictationTopic
JScript	In JScript, you can use structures, but you cannot define your own.

Members Table

Remarks

Standard topics (general, spelling) are predefined, others can be created.

Structure Information

Namespace	System.Speech.Recognition
Assembly	System.Speech (system.speech.dll)
Strong Name	System.Speech, Version=6.0.4044.0, Culture=neutral, PublicKeyToken=365143bb27e7ac8b

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DictationTopic Method

Note: This documentation is preliminary and is subject to change.

Create a new dictation topic from a topic name.

Definition

Visual Basic

```
Public Sub DictationTopic( _
    ByVal topicName As String _
)
```

C#

```
public DictationTopic(
    string topicName
```

```
            );
            public: DictationTopic(
Managed C++    String* topicName
            );
            public function DictationTopic(
  JScript      topicName : String
            );
```

Parameters

topicName **System.String**.

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Equals Method

Note: This documentation is preliminary and is subject to change.

Gets a value indicating whether the tag formats represent the same string.

Overload List

public override Boolean Equals (Object)
public override Boolean Equals (DictationTopic)

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GetHashCode Method

Note: This documentation is preliminary and is subject to change.

Gets the hash code of the tag format string.

Definition

```
Visual Basic  Overrides Public Function GetHashCode() As Integer
     C#       public override int GetHashCode();
Managed C++   public: int GetHashCode();
   JScript    public override function GetHashCode() : int;
```

Return Value

System.Int32.

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ToString Method

Note: This documentation is preliminary and is subject to change.

Gets a string representation of the topic name.

Definition

Visual Basic	Overrides Public Function **ToString**() As **String**
C#	public override **string ToString**();
Managed C++	public: **String*** **ToString**();
JScript	public override function **ToString**() : **String**;

Return Value

System.String.

String representation

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General Property

Note: This documentation is preliminary and is subject to change.

Gets a general dictation topic.

Definition

Visual Basic	Public Shared ReadOnly Property **General** As **DictationTopic**
C#	public static **DictationTopic General** { get; }
Managed C++	public: __property static **DictationTopic** get_**General**();
JScript	public static function get **General**() : **DictationTopic**

Property Value

System.Speech.Recognition.DictationTopic.

This property is read-only.

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Spelling Property

Note: This documentation is preliminary and is subject to change.

Gets a spelling topic.

Definition

Visual Basic	Public Shared ReadOnly Property **Spelling** As **DictationTopic**
C#	public static **DictationTopic** **Spelling** { get; }
Managed C++	public: __property static **DictationTopic** get_**Spelling**();
JScript	public static function get **Spelling**() : **DictationTopic**

Property Value

System.Speech.Recognition.DictationTopic.

This property is read-only.

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ActiveCategoryChangedEventHandler Delegate

Note: This documentation is preliminary and is subject to change.

Represents the method that will handle the ActiveCategoryChangedEventHandler event.

Definition

Visual Basic

```
Public Delegate Sub ActiveCategoryChangedEventHandler( _
   ByVal sender As Object, _
   ByVal e As ActiveCategoryChangedEventArgs _
)
```

C#

```
public delegate void ActiveCategoryChangedEventHandler(
   object sender,
   ActiveCategoryChangedEventArgs e
);
```

```
public: __gc __delegate void ActiveCategoryChangedEventHandler(
   Object* sender,
```

Managed C++
```
ActiveCategoryChangedEventArgs* e
);
```

JScript In JScript, you can use delegates, but you cannot define your own.

Parameters

sender **System.Object.**
e **System.Speech.Recognition.ActiveCategoryChangedEventArgs.**

Delegate Information

Namespace System.Speech.Recognition
Assembly System.Speech (system.speech.dll)
Strong Name System.Speech, Version=6.0.4044.0, Culture=neutral, PublicKeyToken=365143bb27e7ac8b

---

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AudioContentChangedEventHandler Delegate

Note: This documentation is preliminary and is subject to change.

Represents the method that will handle the AudioContentChanged event.

Definition

Visual Basic
```
Public Delegate Sub AudioContentChangedEventHandler( _
  ByVal sender As Object, _
  ByVal e As AudioContentChangedEventArgs _
)
```

C#
```
public delegate void AudioContentChangedEventHandler(
  object sender,
  AudioContentChangedEventArgs e
);
```

Managed C++
```
public: __gc __delegate void AudioContentChangedEventHandler(
  Object* sender,
  AudioContentChangedEventArgs* e
);
```

JScript In JScript, you can use delegates, but you cannot define your own.

Parameters

sender **System.Object.**
e **System.Speech.Recognition.AudioContentChangedEventArgs.**

Delegate Information

Namespace	System.Speech.Recognition
Assembly	System.Speech (system.speech.dll)
Strong Name	System.Speech, Version=6.0.4044.0, Culture=neutral, PublicKeyToken=365143bb27e7ac8b

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BookmarkEventHandler Delegate

Note: This documentation is preliminary and is subject to change.

Represents the method that will handle the Bookmark event.

Definition

Visual Basic

```
Public Delegate Sub BookmarkEventHandler( _
   ByVal sender As Object, _
   ByVal e As BookmarkEventArgs _
)
```

C#

```
public delegate void BookmarkEventHandler(
   object sender,
   BookmarkEventArgs e
);
```

Managed C++

```
public: __gc __delegate void BookmarkEventHandler(
   Object* sender,
   BookmarkEventArgs* e
);
```

JScript In JScript, you can use delegates, but you cannot define your own.

Parameters

sender **System.Object**.
e **System.Speech.Recognition.BookmarkEventArgs**.

Delegate Information

Namespace	System.Speech.Recognition
Assembly	System.Speech (system.speech.dll)
Strong Name	System.Speech, Version=6.0.4044.0, Culture=neutral, PublicKeyToken=365143bb27e7ac8b

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CommandRecognitionEventHandler Delegate

Note: This documentation is preliminary and is subject to change.

Represents the method that will handle the CommandRecognition event in Command and CommandSet.

Definition

Visual Basic

```
Public Delegate Sub CommandRecognitionEventHandler( _
   ByVal sender As Object, _
   ByVal e As CommandRecognitionEventArgs _
)
```

C#

```
public delegate void CommandRecognitionEventHandler(
   object sender,
   CommandRecognitionEventArgs e
);
```

Managed C++

```
public: __gc __delegate void CommandRecognitionEventHandler(
   Object* sender,
   CommandRecognitionEventArgs* e
);
```

JScript In JScript, you can use delegates, but you cannot define your own.

Parameters

sender **System.Object.**
e **System.Speech.Recognition.CommandRecognitionEventArgs.**

Delegate Information

Namespace	System.Speech.Recognition
Assembly	System.Speech (system.speech.dll)
Strong Name	System.Speech, Version=6.0.4044.0, Culture=neutral, PublicKeyToken=365143bb27e7ac8b

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InterferenceEventHandler Delegate

Note: This documentation is preliminary and is subject to change.

Represents the method that will handle the InterferenceDetected event.

Definition

Visual Basic

```
Public Delegate Sub InterferenceEventHandler( _
   ByVal sender As Object, _
   ByVal e As InterferenceEventArgs _
)
```

C#

```
public delegate void InterferenceEventHandler(
   object sender,
   InterferenceEventArgs e
);
```

Managed C++

```
public: __gc __delegate void InterferenceEventHandler(
   Object* sender,
   InterferenceEventArgs* e
);
```

JScript In JScript, you can use delegates, but you cannot define your own.

Parameters

sender **System.Object.**
e **System.Speech.Recognition.InterferenceEventArgs.**

Delegate Information

Namespace	System.Speech.Recognition
Assembly	System.Speech (system.speech.dll)
Strong Name	System.Speech, Version=6.0.4044.0, Culture=neutral, PublicKeyToken=365143bb27e7ac8b

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RecognitionEventHandler Delegate

Note: This documentation is preliminary and is subject to change.

Represents the method that will handle the following events: Recognition, RejectedRecognition, and Hypothesis.

Definition

Visual Basic

```
Public Delegate Sub RecognitionEventHandler( _
   ByVal sender As Object, _
   ByVal e As RecognitionEventArgs _
)
```

```
public delegate void RecognitionEventHandler(
   object sender,
```

C#
```
    RecognitionEventArgs e
);
```

Managed C++
```
public: __gc __delegate void RecognitionEventHandler(
    Object* sender,
    RecognitionEventArgs* e
);
```

JScript In JScript, you can use delegates, but you cannot define your own.

Parameters

sender **System.Object.**
e **System.Speech.Recognition.RecognitionEventArgs.**

Delegate Information

Namespace	System.Speech.Recognition
Assembly	System.Speech (system.speech.dll)
Strong Name	System.Speech, Version=6.0.4044.0, Culture=neutral, PublicKeyToken=365143bb27e7ac8b

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RecognizeCompletedEventHandler Delegate

Note: This documentation is preliminary and is subject to change.

Represents the method that will handle the RecognizeCompleted event.

Definition

Visual Basic
```
Public Delegate Sub RecognizeCompletedEventHandler( _
    ByVal sender As Object, _
    ByVal e As RecognizeCompletedEventArgs _
)
```

C#
```
public delegate void RecognizeCompletedEventHandler(
    object sender,
    RecognizeCompletedEventArgs e
);
```

Managed C++
```
public: __gc __delegate void RecognizeCompletedEventHandler(
    Object* sender,
    RecognizeCompletedEventArgs* e
);
```

JScript In JScript, you can use delegates, but you cannot define your own.

Parameters

sender **System.Object.**
e **System.Speech.Recognition.RecognizeCompletedEventArgs.**

Delegate Information

Namespace	System.Speech.Recognition
Assembly	System.Speech (system.speech.dll)
Strong Name	System.Speech, Version=6.0.4044.0, Culture=neutral, PublicKeyToken=365143bb27e7ac8b

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RecognizeProgressChangedEventHandler Delegate

Note: This documentation is preliminary and is subject to change.

Represents the method that will handle the RecognizeProgressChanged event.

Definition

Visual Basic
```
Public Delegate Sub RecognizeProgressChangedEventHandler( _
   ByVal sender As Object, _
   ByVal e As RecognizeProgressChangedEventArgs _
)
```

C#
```
public delegate void RecognizeProgressChangedEventHandler(
   object sender,
   RecognizeProgressChangedEventArgs e
);
```

Managed C++
```
public: __gc __delegate void RecognizeProgressChangedEventHandler(
   Object* sender,
   RecognizeProgressChangedEventArgs* e
);
```

JScript In JScript, you can use delegates, but you cannot define your own.

Parameters

sender **System.Object.**
e **System.Speech.Recognition.RecognizeProgressChangedEventArgs.**

Delegate Information

Namespace	System.Speech.Recognition
Assembly	System.Speech (system.speech.dll)
Strong Name	System.Speech, Version=6.0.4044.0, Culture=neutral, PublicKeyToken=365143bb27e7ac8b

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RecognizerStateChangedEventHandler Delegate

Note: This documentation is preliminary and is subject to change.

Represents the method that will handle the RecognizerStateChanged event.

Definition

Visual Basic

```
Public Delegate Sub RecognizerStateChangedEventHandler( _
   ByVal sender As Object, _
   ByVal e As RecognizerStateChangedEventArgs _
)
```

C#

```
public delegate void RecognizerStateChangedEventHandler(
   object sender,
   RecognizerStateChangedEventArgs e
);
```

Managed C++

```
public: __gc __delegate void RecognizerStateChangedEventHandler(
   Object* sender,
   RecognizerStateChangedEventArgs* e
);
```

JScript In JScript, you can use delegates, but you cannot define your own.

Parameters

sender **System.Object.**

e **System.Speech.Recognition.RecognizerStateChangedEventArgs.**

Delegate Information

Namespace	System.Speech.Recognition
Assembly	System.Speech (system.speech.dll)
Strong Name	System.Speech, Version=6.0.4044.0, Culture=neutral, PublicKeyToken=365143bb27e7ac8b

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SpeechEventHandler Delegate

Note: This documentation is preliminary and is subject to change.

Represents the method that will handle the following events: NoRecognition, AudioLevelChanged, RecognitionStarted, RecognitionStopped, RecognitionCanceled, RecognitionPaused, and RecognitionResumed.

Definition

Visual Basic

```
Public Delegate Sub SpeechEventHandler( _
    ByVal sender As Object, _
    ByVal e As SpeechEventArgs _
)
```

C#

```
public delegate void SpeechEventHandler(
    object sender,
    SpeechEventArgs e
);
```

Managed C++

```
public: __gc __delegate void SpeechEventHandler(
    Object* sender,
    SpeechEventArgs* e
);
```

JScript In JScript, you can use delegates, but you cannot define your own.

Parameters

sender **System.Object.**
e **System.Speech.Recognition.SpeechEventArgs.**

Delegate Information

Namespace	System.Speech.Recognition
Assembly	System.Speech (system.speech.dll)
Strong Name	System.Speech, Version=6.0.4044.0, Culture=neutral, PublicKeyToken=365143bb27e7ac8b

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UpdateEventHandler Delegate

Note: This documentation is preliminary and is subject to change.

Represents the methods that handle the Updated event and related events.

Definition

Visual Basic

```
Public Delegate Sub UpdateEventHandler( _
   ByVal sender As Object, _
   ByVal e As UpdateEventArgs _
)
```

C#

```
public delegate void UpdateEventHandler(
   object sender,
   UpdateEventArgs e
);
```

Managed C++

```
public: __gc __delegate void UpdateEventHandler(
   Object* sender,
   UpdateEventArgs* e
);
```

JScript In JScript, you can use delegates, but you cannot define your own.

Parameters

sender **System.Object**.
e **System.Speech.Recognition.UpdateEventArgs**.

Delegate Information

Namespace	System.Speech.Recognition
Assembly	System.Speech (system.speech.dll)
Strong Name	System.Speech, Version=6.0.4044.0, Culture=neutral, PublicKeyToken=365143bb27e7ac8b

Remarks

The RequestUpdate and related methods are used to request that the recognition engine pause to allow changes to grammars or other changes to be made. When the engine responds to the request, the Update event is called to allow the application to make the necessary changes. After the application returns from the event the recognition engine resumes processing. While the event is being called, recognition will not be occurring, but input audio will continue to be collected and stored by the Recognizer in an audio buffer. After the application returns from the event the buffered audio data will be processed ensuring that no real-time audio data is lost and that the user experience is not interrupted.

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System.Speech.Srgs

Note: This documentation is preliminary and is subject to change.

The following tables list the members exposed by the System.Speech.Srgs namespace.

Classes

Example	Represents the World Wide Web Consortium (W3C) Speech Recognition Grammar Specification (SRGS) example element. See http://www.w3.org/TR/speech-grammar/ for more information.
Item	Represents the World Wide Web Corsortium (W3C) Speech Recognition Grammar Specification (SRGS) item element. See http://www.w3.org/TR/speech-grammar/ for more information.
ItemElementCollection	Represents the collection of objects that can be children of an Item class instance.
OneOf	Represents the World Wide Web Consortium (W3C) Speech Recognition Grammar Specification (SRGS) one-of element. See http://www.w3.org/TR/speech-grammar/ for more information.
OneOfElementCollection	Represents a collection of objects that can be child elements of an OneOf class instance.
PropertyTag	Represents the World Wide Web Consortium (W3C) Speech Recognition Grammar Specification (SRGS) tag element with SAPI Properties. See http://www.w3.org/TR/speech-grammar/ for more information.
Rule	Represents the World Wide Web Consortium (W3C) Speech Recognition Grammar Specification (SRGS) rule element. See http://www.w3c.org/TR/speech-grammar/ for more information.
RuleCollection	Represents a collection of objects that can be child elements of a Rule class instance.
RuleElementCollection	Represents a collection of objects that are valid within a Rule class instance.
RuleRef	Example represents the World Wide Web Consortium (W3C) Speech Recognition Grammar Specification (SRGS) ruleref element. See http://www.w3.org/TR/speech-grammar/ for more information.
SpecialRuleRef	SpecialRuleRef class instance allow grammars based on context-free grammars (CFG) to have powerful additional features, such as transitions into dictation (both recognized or not recognized) and word seqeuences from SAPI 5.0.
SrgsGrammar	Represents the logical housing for individual rules and dictation grammars.
SrgsText	Represents text content in Speech Recognition Grammar Specification (SRGS) markup.
Tag	Represents the World Wide Web Consortium (W3C) Speech Recognition Grammar Specification (SRGS) tag element. See http://www.w3.org/TR/speech-grammar/ for more information.
Token	Token represents the World Wide Web Consortium (W3C) Speech Recognition Grammar Specification (SRGS) token element. See http://www.w3.org/TR/speech-grammar/ for more

information.

Interfaces

IItemElement	The IItemElement interface is an empty interface implemented by all Speech Recognition Grammar Specification (SRGS) elements that can be a child element of the item element. (Item, OneOf, RuleRef, SpecialRuleRef, Tag, Token, SrgsText)
IRuleElement	The IRuleElement interface is an empty interface implemented by all Speech Recognition Grammar Specification (SRGS) elements that can be a child element of the Rule element. (Example, Item, OneOf, RuleRef, SpecialRuleRef, Tag, Token, SrgsText)

Enumerations

GrammarMode	Identifies the grammar mode as either Voice or dual tone, multi-frequency (DTMF).
RuleScope	RuleScope specifies how a rule behaves. The behavior includes whether or not it can be referenced by other rules and whether or not the rule can be activated.
SpecialRuleRefType	Special rule references allow grammars based on context-free grammars (CFG) to have powerful additional features, such as transitions into dictation (both recognized or not recognized) and word sequences from SAPI 5.0.

Structures

TagFormat TagFormat extensible enumeration.

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Example Class

Note: This documentation is preliminary and is subject to change.

Represents the World Wide Web Consortium (W3C) Speech Recognition Grammar Specification (SRGS) example element. See http://www.w3.org/TR/speech-grammar/ for more information.

Definition

Visual Basic

```
Public Class Example
    Inherits Object
    Implements IRuleElement
```

C#	public class **Example** : *Object*, IRuleElement
Managed C++	public __gc class **Example** : public *Object*, IRuleElement
JScript	public class **Example** extends *Object* implements *IRuleElement*

Members Table

Inheritance Hierarchy

Object
Leave
Example

Class Information

Namespace	System.Speech.Srgs
Assembly	System.Speech (system.speech.dll)
Strong Name	System.Speech, Version=6.0.4044.0, Culture=neutral, PublicKeyToken=365143bb27e7ac8b

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Example Method

Note: This documentation is preliminary and is subject to change.

Initializes a new instance of the Example class.

Overload List

public Example ()
public Example (String)

Remarks

The Example property must be set prior to committing the associated rule(s) to the Grammar object.

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ToString Method

Note: This documentation is preliminary and is subject to change.

Definition

Visual Basic	Overrides Public Function **ToString**() As **String**
C#	public override **string ToString**();
Managed C++	public: **String*** **ToString**();
JScript	public override function **ToString**() : **String**;

Return Value

System.String.

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Text Property

Note: This documentation is preliminary and is subject to change.

Gets and sets Example class text.

Definition

Visual Basic	Public Property **Text** As **String**
C#	public **string Text** { get; set; }
Managed C++	public: __property **String*** get_**Text**(); public: __property void set_**Text**(**String***);
JScript	public function get **Text**() : **String** public function set **Text**(**String**);

Property Value

System.String.

This property is read/write.

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Item Class

Note: This documentation is preliminary and is subject to change.

Represents the World Wide Web Corsortium (W3C) Speech Recognition Grammar Specification (SRGS) item element. See http://www.w3.org/TR/speech-grammar/ for more information.

Definition

Visual Basic	Public Class **Item** Inherits *Object* Implements *IItemElement*, *IRuleElement*
C#	public class **Item** : *Object*, IItemElement, IRuleElement
Managed C++	public __gc class **Item** : public *Object*, IItemElement, IRuleElement
JScript	public class **Item** extends *Object* implements *IRuleElement*, *IItemElement*

Members Table

Inheritance Hierarchy

Object
Leave
Item

Class Information

Namespace	System.Speech.Srgs
Assembly	System.Speech (system.speech.dll)
Strong Name	System.Speech, Version=6.0.4044.0, Culture=neutral, PublicKeyToken=365143bb27e7ac8b

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Item Method

Note: This documentation is preliminary and is subject to change.

Initializes a new instance of the Item class.

Overload List

public Item ()
public Item (String)
public Item (String, Tag)
public Item (String, PropertyTag)

public Item (String, Tag, Single)
public Item (Int32, Int32)
public Item (Int32, Int32, Single)
public Item (IItemElement)

Remarks

The weight of an Item is the probability that the user will speak the phrase contained in the Item, as opposed to another phrase contained in a sibling Item.

The minRepeat parameter describes the number of occurrences the user must speak the phrase contained in this Item class instance for the recognition to be successful.

The maxRepeat parameter describes the number of occurrences the user can speak the phrase contained in this Item class instance and still have a successful recognition.

The minRepeat parameter describes the number of occurrences the user must speak the phrase contained in this Item class instance for the recognition to be successful.

The maxRepeat parameter describes the number of occurrences the user can speak the phrase contained in this Item class instance and still have a successful recognition.

The repeatProbability parameter describes the probability that the phrase contained in this Item class instance will be repeated one or more times.

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SetRepeat Method

Note: This documentation is preliminary and is subject to change.

Sets the repeat count for the Item class instance.

Overload List

public Void SetRepeat (Int32)
public Void SetRepeat (Int32, Int32)

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Elements Property

Note: This documentation is preliminary and is subject to change.

Gets the zero-based collection of all the child elements of the Item class instance. Read only.

Definition

Visual Basic	Public ReadOnly Property **Elements** As **ItemElementCollection**
C#	public **ItemElementCollection** **Elements** { get; }
Managed C++	public: __property **ItemElementCollection*** get_**Elements**();
JScript	public function get **Elements**() : **ItemElementCollection**

Property Value

System.Speech.Srgs.ItemElementCollection.

This property is read-only.

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MaxRepeat Property

Note: This documentation is preliminary and is subject to change.

Gets the maximum number of occurrences this Item class instance can be repeated for a successful recognition. Read-only.

Definition

Visual Basic	Public ReadOnly Property **MaxRepeat** As **Integer**
C#	public **int** **MaxRepeat** { get; }
Managed C++	public: __property **int** get_**MaxRepeat**();
JScript	public function get **MaxRepeat**() : **int**

Property Value

System.Int32.

This property is read-only.

Remarks

This property represents a portion of the repeat attribute of the World Wide Web Consortium (W3C) Speech Recognition Grammar Specification (SRGS) item element.

See Also

- MaxRepeat

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MinRepeat Property

Note: This documentation is preliminary and is subject to change.

Gets the minimum number of occurrences this Item class instance must be repeated for a successful recognition. Read-only.

Definition

Visual Basic	Public ReadOnly Property **MinRepeat** As **Integer**
C#	public **int** **MinRepeat** { get; }
Managed C++	public: __property **int** get_**MinRepeat**();
JScript	public function get **MinRepeat**() : **int**

Property Value

System.Int32.

This property is read-only.

Remarks

This property represents a portion of the repeat attribute of the World Wide Web Consortium (W3C) Speech Recognition Grammar Specification (SRGS) item element.

See Also

- MaxRepeat

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RepeatProbability Property

Note: This documentation is preliminary and is subject to change.

Gets and sets a value representing the probability that the phrase contained in an Item class instance will be repeated.

Definition

Visual Basic	Public Property **RepeatProbability** As **Single**

C#	public **float RepeatProbability** { get; set; }
Managed C++	public: __property **float** get_**RepeatProbability**(); public: __property void set_**RepeatProbability(float)**;
JScript	public function get **RepeatProbability**() : **float** public function set **RepeatProbability(float)**;

Property Value

System.Single.

This property is read/write.

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Weight Property

Note: This documentation is preliminary and is subject to change.

Gets and sets the likelihood that the phrase contained in an Item class instance will be uttered when contained within a OneOf class instance.

Definition

Visual Basic	Public Property **Weight** As **Single**
C#	public **float Weight** { get; set; }
Managed C++	public: __property **float** get_**Weight**(); public: __property void set_**Weight(float)**;
JScript	public function get **Weight**() : **float** public function set **Weight(float)**;

Property Value

System.Single.

This property is read/write.

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ItemElementCollection Class

Note: This documentation is preliminary and is subject to change.

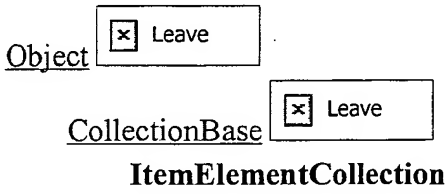
Represents the collection of objects that can be children of an Item class instance.

Definition

Visual Basic	Public Class **ItemElementCollection** Inherits *CollectionBase*
C#	public class **ItemElementCollection** : *CollectionBase*
Managed C++	public __gc class **ItemElementCollection** : public *CollectionBase*
JScript	public class **ItemElementCollection** extends *CollectionBase*

Members Table

Inheritance Hierarchy



Class Information

Namespace	System.Speech.Srgs
Assembly	System.Speech (system.speech.dll)
Strong Name	System.Speech, Version=6.0.4044.0, Culture=neutral, PublicKeyToken=365143bb27e7ac8b

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Add Method

Note: This documentation is preliminary and is subject to change.

Adds a new Item class instance to the RuleElementCollection.

Overload List

public Int32 Add (Item)
public Int32 Add (OneOf)
public Int32 Add (RuleRef)
public Int32 Add (SpecialRuleRef)
public Int32 Add (Tag)
public Int32 Add (Token)
public Int32 Add (SrgsText)
public Int32 Add (String)

public Int32 Add (IItemElement)

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AddItem Method

Note: This documentation is preliminary and is subject to change.

Adds a new Item class instance to the ItemElementCollection.

Overload List

public Void AddItem (Item)
public Item AddItem ()
public Item AddItem (String)
public Item AddItem (String, String)
public Item AddItem (String, String, Object)

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AddItems Method

Note: This documentation is preliminary and is subject to change.

Adds multiple Item class instances to the ItemElementCollection.

Overload List

public Item AddItems (String, String)
public Item AddItems (String, String, String)
public Item AddItems (String[])

Remarks

This is essentially a macro for calling AddItem twice.

This is essentially a macro for calling AddItem three times

This is essentially a macro for calling AddItem multiple times.

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AddOneOf Method

Note: This documentation is preliminary and is subject to change.

Adds a OneOf class instance to the ItemElementCollection.

Overload List

public Void AddOneOf (OneOf)
public OneOf AddOneOf ()
public OneOf AddOneOf (String, String)
public OneOf AddOneOf (String, String, String)
public OneOf AddOneOf (String[])
public OneOf AddOneOf (Item[])

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AddOptionalItem Method

Note: This documentation is preliminary and is subject to change.

Adds a new optional Item class instance to the ItemElementCollection.

Overload List

public Item AddOptionalItem ()
public Item AddOptionalItem (String)

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AddRepeatingItem Method

Note: This documentation is preliminary and is subject to change.

Adds a new Item class instance to the ItemElementCollection. This instance contains the minimum and maximum number of repetitions required for successful recognition.

Definition

Public Function **AddRepeatingItem**(_

Visual Basic
```
    ByVal minRepeat As Integer, _
    ByVal maxRepeat As Integer _
) As Item
```

C#
```
public Item AddRepeatingItem(
    int minRepeat,
    int maxRepeat
);
```

Managed C++
```
public: Item* AddRepeatingItem(
    int minRepeat,
    int maxRepeat
);
```

JScript
```
public function AddRepeatingItem(
    minRepeat : int,
    maxRepeat : int
) : Item;
```

Parameters

minRepeat **System.Int32**. Minimum number of occurrences of the new Item class instance.

maxRepeat **System.Int32**. Maximum number of occurrences of the new Item class instance.

Return Value

System.Speech.Srgs.Item.

Returns the newly added Item class instance.

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AddRuleRef Method

Note: This documentation is preliminary and is subject to change.

Adds a new RuleRef class instance to the ItemElementCollection.

Overload List

public Void AddRuleRef (RuleRef)
public RuleRef AddRuleRef (String)
public RuleRef AddRuleRef (Rule)

Remarks

This method can also be used to refer to dictation grammars. The general dictation model is referenced by: AddRuleRef("recognitiontopic:general"); and a specific topic. For example: AddRuleRef("recognitiontopic:spelling");

If the rule is part of the same grammar, the rule reference will be a local reference.

If the rule is part of another grammar, the rule reference will automatically be determined based on the grammar that the rule comes from.

For example, if the rule is part of a grammar that was loaded with a call to Grammar.Load, the URI specified in that call is used and the Rule.Id is used for the local part. For example the URI appears in the form: "{0}#{1}", where 0=URI from Grammar.Load, and 1=Rule.Id.

Another example is if the rule is part of a grammar that's been built dynamically, the rule is automatically added (at Commit time) to the Grammar that this rule reference is a part of, if it doesn't already appear there.

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AddSpecialRuleRef Method

Note: This documentation is preliminary and is subject to change.

Adds a new SpecialRuleRef class instance to the ItemElementCollection.

Definition

Visual Basic

```
Public Sub AddSpecialRuleRef( _
    ByVal specialRuleRef As SpecialRuleRef _
)
```

C#

```
public void AddSpecialRuleRef(
    SpecialRuleRef specialRuleRef
);
```

Managed C++

```
public: void AddSpecialRuleRef(
    SpecialRuleRef* specialRuleRef
);
```

JScript

```
public function AddSpecialRuleRef(
    specialRuleRef : SpecialRuleRef
) : void;
```

Parameters

specialRuleRef **System.Speech.Srgs.SpecialRuleRef**. The SpecialRuleRef class instance being added.

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AddTag Method

Note: This documentation is preliminary and is subject to change.

Adds a Tag class instance to the ItemElementCollection.

Overload List

public Void AddTag (Tag)
public Tag AddTag (String)

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AddToken Method

Note: This documentation is preliminary and is subject to change.

Adds a new Token class instance to the ItemElementCollection.

Overload List

public Void AddToken (Token)
public Token AddToken (String)
public Token AddToken (String, String)

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Contains Method

Note: This documentation is preliminary and is subject to change.

Determines whether the ItemElementCollection contains the specified IItemElement.

Definition

Visual Basic

```
Public Function Contains( _
    ByVal element As IItemElement _
) As Boolean
```

```
C#
public bool Contains(
   IItemElement element
);

Managed C++
public: bool Contains(
   IItemElement* element
);

JScript
public function Contains(
   element : IItemElement
) : boolean;
```

Parameters

element **System.Speech.Srgs.IItemElement**. The IItemElement to locate in the ItemElementCollection.

Return Value

System.Boolean.

Returns true if the ItemElementCollection contains the specified IItemElement; otherwise, false is returned.

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IndexOf Method

Note: This documentation is preliminary and is subject to change.

Searches the ItemElement Collection for the specified IItemElement.

Definition

```
Visual Basic
Public Function IndexOf( _
   ByVal element As IItemElement _
) As Integer

C#
public int IndexOf(
   IItemElement element
);

Managed C++
public: int IndexOf(
   IItemElement* element
);

JScript
public function IndexOf(
   element : IItemElement
) : int;
```

Parameters

element **System.Speech.Srgs.IItemElement**. The IItemElement being located within the ItemElementCollection.

Return Value

System.Int32.

Returns the zero-based index of the first occurrence of the IItemElement within the ItemElementCollection, if found; otherwise, -1 is returned.

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Insert Method

Note: This documentation is preliminary and is subject to change.

Inserts a new IItemElement into the ItemElementCollection at the specified index location.

Definition

Visual Basic

```
Public Sub Insert( _
   ByVal index As Integer, _
   ByVal element As IItemElement _
)
```

C#

```
public void Insert(
   int index,
   IItemElement element
);
```

Managed C++

```
public: void Insert(
   int index,
   IItemElement* element
);
```

JScript

```
public function Insert(
   index : int,
   element : IItemElement
) : void;
```

Parameters

index **System.Int32**. The zero-based index where the IItemElement is to be inserted.
element **System.Speech.Srgs.IItemElement**. The IItemElement to insert.

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ItemElementCollection Method

Note: This documentation is preliminary and is subject to change.

Initializes a new instance of the ItemElementCollection class and specifies the owning Item class instance.

Definition

```
Visual Basic  Public Sub ItemElementCollection( _
                  ByVal owner As Item _
              )
C#            public ItemElementCollection(
                  Item owner
              );
Managed C++   public: ItemElementCollection(
                  Item* owner
              );
JScript       public function ItemElementCollection(
                  owner : Item
              );
```

Parameters

owner **System.Speech.Srgs.Item**. Item class instance.

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OnClear Method

Note: This documentation is preliminary and is subject to change.

Definition

```
Visual Basic  Overrides Protected Sub OnClear()
C#            protected override void OnClear();
Managed C++   protected: void OnClear();
JScript       protected override function OnClear() : void;
```

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OnInsert Method

Note: This documentation is preliminary and is subject to change.

Definition

Visual Basic

```
Overrides Protected Sub OnInsert( _
   ByVal index As Integer, _
   ByVal value As Object _
)
```

C#

```
protected override void OnInsert(
   int index,
   object value
);
```

Managed C++

```
protected: void OnInsert(
   int index,
   Object* value
);
```

JScript

```
protected override function OnInsert(
   index : int,
   value : Object
) : void;
```

Parameters

index **System.Int32.**
value **System.Object.**

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OnRemove Method

Note: This documentation is preliminary and is subject to change.

Definition

Visual Basic

```
Overrides Protected Sub OnRemove( _
   ByVal index As Integer, _
   ByVal value As Object _
)
```

C#

```
protected override void OnRemove(
   int index,
   object value
);
```

Managed C++

```
protected: void OnRemove(
   int index,
   Object* value
);
```

JScript

```
protected override function OnRemove(
   index : int,
   value : Object
) : void;
```

Parameters

index **System.Int32.**
value **System.Object.**

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OnSet Method

Note: This documentation is preliminary and is subject to change.

Definition

Visual Basic

```
Overrides Protected Sub OnSet( _
   ByVal index As Integer, _
   ByVal oldValue As Object, _
   ByVal newValue As Object _
)
```

C#

```
protected override void OnSet(
   int index,
   object oldValue,
   object newValue
);
```

Managed C++

```
protected: void OnSet(
   int index,
   Object* oldValue,
   Object* newValue
);
```

JScript

```
protected override function OnSet(
   index : int,
   oldValue : Object,
   newValue : Object
) : void;
```

Parameters

index **System.Int32.**
oldValue **System.Object.**
newValue **System.Object.**

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OnValidate Method

Note: This documentation is preliminary and is subject to change.

Definition

Visual Basic
```
Overrides Protected Sub OnValidate( _
   ByVal element As Object _
)
```

C#
```
protected override void OnValidate(
   object element
);
```

Managed C++
```
protected: void OnValidate(
   Object* element
);
```

JScript
```
protected override function OnValidate(
   element : Object
) : void;
```

Parameters

element **System.Object.**

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Remove Method

Note: This documentation is preliminary and is subject to change.

Removes the first occurrence of a specific IItemElement from the ItemElementCollection.

Definition

Visual Basic
```
Public Sub Remove( _
   ByVal element As IItemElement _
)
```

```
C#
public void Remove(
   IItemElement element
);

Managed C++
public: void Remove(
   IItemElement* element
);

JScript
public function Remove(
   element : IItemElement
) : void;
```

Parameters

element **System.Speech.Srgs.IItemElement**. The IItemElement being removed from the ItemElementCollection.

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Item Property

Note: This documentation is preliminary and is subject to change.

Retrieves a child element of the Item class instance from the IItemElementCollection using its index value.

Definition

```
Visual Basic
Public Property Item( _
   ByVal index As Integer _
) As IItemElement

C#
public IItemElement this[
   int index
] { get; set; }

Managed C++
public: __property IItemElement* get_Item(
   int index
);
public: __property void set_Item(
   int index,
   IItemElement*
);
```

JScript In JScript, you can use indexed properties, but you cannot define your own.

Property Value

System.Speech.Srgs.IItemElement.

This property is read/write.

Parameters

index **System.Int32**. Value indicating the child element's location within the ItemElementCollection.

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OneOf Class

Note: This documentation is preliminary and is subject to change.

Represents the World Wide Web Consortium (W3C) Speech Recognition Grammar Specification (SRGS) one-of element. See http://www.w3.org/TR/speech-grammar/ for more information.

Definition

Visual Basic	Public Class **OneOf** Inherits *Object* Implements *IItemElement*, *IRuleElement*
C#	public class **OneOf** : *Object*, IItemElement, IRuleElement
Managed C++	public __gc class **OneOf** : public *Object*, IItemElement, IRuleElement
JScript	public class **OneOf** extends *Object* implements *IRuleElement*, *IItemElement*

Members Table

Inheritance Hierarchy

Object [Leave]

OneOf

Class Information

Namespace	System.Speech.Srgs
Assembly	System.Speech (system.speech.dll)
Strong Name	System.Speech, Version=6.0.4044.0, Culture=neutral, PublicKeyToken=365143bb27e7ac8b

---

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OneOf Method

Note: This documentation is preliminary and is subject to change.

Initializes a new instance of the OneOf class.

Overload List

public OneOf ()
public OneOf (String[])
public OneOf (IItemElement[])

Examples

The following code example populates a OneOf element with a list of colors.

```
// Build ChangeColor grammar      ChangeColorGrammar = new Srgs.SrgsGrammar("Ch

' Build ChangeColor grammar      ChangeColorGrammar = New Srgs.SrgsGrammar("Cha
```

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Elements Property

Note: This documentation is preliminary and is subject to change.

Gets the collection of all the child elements of the OneOf class instance.

Definition

Visual Basic	Public ReadOnly Property **Elements** As **OneOfElementCollection**
C#	public **OneOfElementCollection** **Elements** { get; }
Managed C++	public: __property **OneOfElementCollection*** get_**Elements**();
JScript	public function get **Elements**() : **OneOfElementCollection**

Property Value

System.Speech.Srgs.OneOfElementCollection.

This property is read-only.

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OneOfElementCollection Class

Note: This documentation is preliminary and is subject to change.

Represents a collection of objects that can be child elements of an OneOf class instance.

Definition

Visual Basic	Public Class **OneOfElementCollection** Inherits *CollectionBase*
C#	public class **OneOfElementCollection** : *CollectionBase*
Managed C++	public __gc class **OneOfElementCollection** : public *CollectionBase*
JScript	public class **OneOfElementCollection** extends *CollectionBase*

Members Table

Inheritance Hierarchy

Object
CollectionBase
OneOfElementCollection

Class Information

Namespace	System.Speech.Srgs
Assembly	System.Speech (system.speech.dll)
Strong Name	System.Speech, Version=6.0.4044.0, Culture=neutral, PublicKeyToken=365143bb27e7ac8b

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Add Method

Note: This documentation is preliminary and is subject to change.

Adds an Item class instance to the the OneOfElementCollection.

Definition

Visual Basic	Public Function **Add**(_ ByVal *item* As **Item** _

```
                ) As Integer
                public int Add(
        C#        Item item
                );
                public: int Add(
Managed C++       Item* item
                );
                public function Add(
    JScript       item : Item
                ) : int;
```

Parameters

item **System.Speech.Srgs.Item**. The Item class instance being added to the OneOfElementCollection.

Return Value

System.Int32.

The OneOfElementCollection index where the Item class instance has been added.

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AddItem Method

Note: This documentation is preliminary and is subject to change.

Adds a new Item class instance to the OneOfElementCollection.

Overload List

public Void AddItem (Item)
public Item AddItem ()
public Item AddItem (String)
public Item AddItem (String, String)
public Item AddItem (String, String, Object)

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AddItems Method

Note: This documentation is preliminary and is subject to change.

Adds two Item class instances to the OneOfElementColleciton. Each Item class instance contains text.

Overload List

public Item AddItems (String, String)
public Item AddItems (String, String, String)
public Item AddItems (String[])

Remarks

This is essentially a macro for calling the AddItem method twice.

This is essentially a macro for calling the AddItem method three times

This is essentially a macro for calling the AddItem method multiple times.

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AddOptionalItem Method

Note: This documentation is preliminary and is subject to change.

Adds a new optional Item class instance to the OneOfElementCollection.

Overload List

public Item AddOptionalItem ()
public Item AddOptionalItem (String)

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AddRepeatingItem Method

Note: This documentation is preliminary and is subject to change.

Adds a new Item class instance to the OneOfElementCollection. This instance contains the minimum and maximum number of repetitions required for successful recognition.

Definition

Public Function **AddRepeatingItem(_**

```
Visual Basic
    ByVal minRepeat As Integer, _
    ByVal maxRepeat As Integer _
) As Item

C#
public Item AddRepeatingItem(
    int minRepeat,
    int maxRepeat
);

Managed C++
public: Item* AddRepeatingItem(
    int minRepeat,
    int maxRepeat
);

JScript
public function AddRepeatingItem(
    minRepeat : int,
    maxRepeat : int
) : Item;
```

Parameters

minRepeat **System.Int32**. Minimum number of occurrences the new Item object must occur.

maxRepeat **System.Int32**. Maximum number of occurrences of the new Item object can occur.

Return Value

System.Speech.Srgs.Item.

Returns the newly added Item class instance.

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Contains Method

Note: This documentation is preliminary and is subject to change.

Determines whether the OneOfElementCollection contains the specified Item class instance.

Definition

```
Visual Basic
Public Function Contains( _
    ByVal item As Item _
) As Boolean

C#
public bool Contains(
    Item item
);
```

```
Managed C++
public: bool Contains(
   Item* item
);

JScript
public function Contains(
   item : Item
) : boolean;
```

Parameters

item **System.Speech.Srgs.Item**. The Item class instance being located within the OneOfElementCollection.

Return Value

System.Boolean.

Returns true if the OneOfElementCollection contains the specified Item class instance; otherwise returns false.

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IndexOf Method

Note: This documentation is preliminary and is subject to change.

Searches for the specified Item class instance and returns the zero-based index of its first occurrence within the OneOfElementCollection.

Definition

```
Visual Basic
Public Function IndexOf( _
   ByVal item As Item _
) As Integer

C#
public int IndexOf(
   Item item
);

Managed C++
public: int IndexOf(
   Item* item
);

JScript
public function IndexOf(
   item : Item
) : int;
```

Parameters

item **System.Speech.Srgs.Item**. The Item class instance being searched for within the OneOfElementCollection.

Return Value

System.Int32.

Returns the zero-based index of the first occurrence of the Item object within the OneOfElementCollection, if found; otherwise returns -1.

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Insert Method

Note: This documentation is preliminary and is subject to change.

Inserts an Item class instance into the OneOfElementCollection at the specified index location.

Definition

Visual Basic

```
Public Sub Insert( _
   ByVal index As Integer, _
   ByVal item As Item _
)
```

C#

```
public void Insert(
   int index,
   Item item
);
```

Managed C++

```
public: void Insert(
   int index,
   Item* item
);
```

JScript

```
public function Insert(
   index : int,
   item : Item
) : void;
```

Parameters

index **System.Int32**. The zero-based index location where the Item class instance is to be inserted.

item **System.Speech.Srgs.Item**. The Item class instance being inserted.

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OnClear Method

Note: This documentation is preliminary and is subject to change.

Definition

Visual Basic	Overrides Protected Sub **OnClear**()
C#	protected override **void OnClear**();
Managed C++	protected: **void OnClear**();
JScript	protected override function **OnClear**() : **void**;

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OneOfElementCollection Method

Note: This documentation is preliminary and is subject to change.

Initializes a new instance of the OneOfElementCollection and specifies the owning OneOf class instance.

Definition

Visual Basic
```
Public Sub OneOfElementCollection( _
  ByVal owner As OneOf _
)
```

C#
```
public OneOfElementCollection(
  OneOf owner
);
```

Managed C++
```
public: OneOfElementCollection(
  OneOf* owner
);
```

JScript
```
public function OneOfElementCollection(
  owner : OneOf
);
```

Parameters

owner **System.Speech.Srgs.OneOf**. Owning OneOf class instance.

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OnInsert Method

Note: This documentation is preliminary and is subject to change.

Definition

Visual Basic

```
Overrides Protected Sub OnInsert( _
   ByVal index As Integer, _
   ByVal value As Object _
)
```

C#

```
protected override void OnInsert(
   int index,
   object value
);
```

Managed C++

```
protected: void OnInsert(
   int index,
   Object* value
);
```

JScript

```
protected override function OnInsert(
   index : int,
   value : Object
) : void;
```

Parameters

index **System.Int32.**
value **System.Object.**

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OnRemove Method

Note: This documentation is preliminary and is subject to change.

Definition

Visual Basic

```
Overrides Protected Sub OnRemove( _
   ByVal index As Integer, _
   ByVal value As Object _
)
```

C#

```
protected override void OnRemove(
   int index,
   object value
);
```

Managed C++

```
protected: void OnRemove(
   int index,
   Object* value
);
```

JScript

```
protected override function OnRemove(
   index : int,
   value : Object
) : void;
```

Parameters

index **System.Int32**.
value **System.Object**.

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OnSet Method

Note: This documentation is preliminary and is subject to change.

Definition

Visual Basic

```
Overrides Protected Sub OnSet( _
   ByVal index As Integer, _
   ByVal oldValue As Object, _
   ByVal newValue As Object _
)
```

C#

```
protected override void OnSet(
   int index,
   object oldValue,
   object newValue
);
```

Managed C++

```
protected: void OnSet(
   int index,
   Object* oldValue,
   Object* newValue
);
```

JScript

```
protected override function OnSet(
   index : int,
   oldValue : Object,
   newValue : Object
) : void;
```

Parameters

index **System.Int32.**
oldValue **System.Object.**
newValue **System.Object.**

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OnValidate Method

Note: This documentation is preliminary and is subject to change.

Definition

Visual Basic
```
Overrides Protected Sub OnValidate( _
    ByVal item As Object _
)
```

C#
```
protected override void OnValidate(
    object item
);
```

Managed C++
```
protected: void OnValidate(
    Object* item
);
```

JScript
```
protected override function OnValidate(
    item : Object
) : void;
```

Parameters

item **System.Object.**

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Remove Method

Note: This documentation is preliminary and is subject to change.

Removes the first occurrence of the specified Item class instance from the OneOfElementCollection.

Definition

Visual Basic
```
Public Sub Remove( _
    ByVal item As Item _
)
```

```
C#
public void Remove(
   Item item
);

Managed C++
public: void Remove(
   Item* item
);

JScript
public function Remove(
   item : Item
) : void;
```

Parameters

item **System.Speech.Srgs.Item**. The Item class instance to remove from the OneOfElementCollection.

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Item Property

Note: This documentation is preliminary and is subject to change.

Retrieves an Item class instance from the OneOfElementCollection using the specified index.

Definition

```
Visual Basic
Public Property Item( _
   ByVal index As Integer _
) As Item

C#
public Item this[
   int index
] { get; set; }

Managed C++
public: __property Item* get_Item(
   int index
);
public: __property void set_Item(
   int index,
   Item*
);
```

JScript In JScript, you can use indexed properties, but you cannot define your own.

Property Value

System.Speech.Srgs.Item.

This property is read/write.

Parameters

index **System.Int32**. Index value.

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PropertyTag Class

Note: This documentation is preliminary and is subject to change.

Represents the World Wide Web Consortium (W3C) Speech Recognition Grammar Specification (SRGS) tag element with SAPI Properties. See http://www.w3.org/TR/speech-grammar/ for more information.

Definition

Visual Basic	Public Class **PropertyTag** Inherits *Object* Implements *IItemElement*, *IRuleElement*
C#	public class **PropertyTag** : *Object*, IItemElement, IRuleElement
Managed C++	public __gc class **PropertyTag** : public *Object*, IItemElement, IRuleElement
JScript	public class **PropertyTag** extends *Object* implements *IRuleElement*, *IItemElement*

Members Table

Inheritance Hierarchy

Object [Leave]

PropertyTag

Class Information

Namespace	System.Speech.Srgs
Assembly	System.Speech (system.speech.dll)
Strong Name	System.Speech, Version=6.0.4044.0, Culture=neutral, PublicKeyToken=365143bb27e7ac8b

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PropertyTag Method

Note: This documentation is preliminary and is subject to change.

Initializes a new instance of the PropertyTag class.

Overload List

public PropertyTag ()
public PropertyTag (String)
public PropertyTag (String, Object)

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ToString Method

Note: This documentation is preliminary and is subject to change.

Definition

Visual Basic	Overrides Public Function **ToString**() As **String**
C#	public override **string ToString**();
Managed C++	public: **String*** **ToString**();
JScript	public override function **ToString**() : **String**;

Return Value

System.String.

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Name Property

Note: This documentation is preliminary and is subject to change.

Gets and sets the name of the semantic property contained within the PropertyTag class instance.

Definition

Visual Basic	Public Property **Name** As **String**

C#	public **string Name** { get; set; }
Managed C++	public: __property **String*** get_**Name**(); public: __property void set_**Name**(**String***);
JScript	public function get **Name**() : **String** public function set **Name**(**String**);

Property Value

System.String.

This property is read/write.

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Value Property

Note: This documentation is preliminary and is subject to change.

Gets and sets the value of semantic property contained within the PropertyTag class instance.

Definition

Visual Basic	Public Property **Value** As **Object**
C#	public **object Value** { get; set; }
Managed C++	public: __property **Object*** get_**Value**(); public: __property void set_**Value**(**Object***);
JScript	public function get **Value**() : **Object** public function set **Value**(**Object**);

Property Value

System.Object.

This property is read/write.

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Rule Class

Note: This documentation is preliminary and is subject to change.

Represents the World Wide Web Consortium (W3C) Speech Recognition Grammar Specification (SRGS) rule element. See http://www.w3c.org/TR/speech-grammar/ for more information.

Definition

Visual Basic	Public Class **Rule** Inherits *Object*
C#	public class **Rule** : *Object*
Managed C++	public __gc class **Rule** : public *Object*
JScript	public class **Rule** extends *Object*

Members Table

Inheritance Hierarchy

Class Information

Namespace	System.Speech.Srgs
Assembly	System.Speech (system.speech.dll)
Strong Name	System.Speech, Version=6.0.4044.0, Culture=neutral, PublicKeyToken=365143bb27e7ac8b

---

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GetXml Method

Note: This documentation is preliminary and is subject to change.

Gets the Extensible Markup Language (XML) markup for this Rule class instance.

Definition

Visual Basic	Public Function **GetXml**() As **String**
C#	public **string GetXml**();
Managed C++	public: **String* GetXml**();
JScript	public function **GetXml**() : **String**;

Return Value

System.String.

Retrurns the XML markup of the Rule class instance.

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Rule Method

Note: This documentation is preliminary and is subject to change.

Initializes a new instance of the Rule class.

Overload List

public Rule ()
public Rule (String)

Remarks

If the Name property is not set prior to commiting the grammar that contains this rule, a unique name is assigned automatically.

The name property refers to the ID property of the RULE W3C SRGS element.

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ToString Method

Note: This documentation is preliminary and is subject to change.

Returns a string representation of this Rule class instance.

Definition

Visual Basic	Overrides Public Function **ToString**() As **String**
C#	public override **string ToString**();
Managed C++	public: **String*** **ToString**();
JScript	public override function **ToString**() : **String**;

Return Value

System.String.

Returns a text string describing the Rule class instance.

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Elements Property

Note: This documentation is preliminary and is subject to change.

Gets the collection of all the child elements of the Rule class instance.

Definition

Visual Basic	Public ReadOnly Property **Elements** As **RuleElementCollection**
C#	public **RuleElementCollection** **Elements** { get; }
Managed C++	public: __property **RuleElementCollection*** get_**Elements**();
JScript	public function get **Elements**() : **RuleElementCollection**

Property Value

System.Speech.Srgs.RuleElementCollection.

This property is read-only.

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Id Property

Note: This documentation is preliminary and is subject to change.

Gets and sets the name of the Rule class instance.

Definition

Visual Basic	Public Property **Id** As **String**
C#	public **string** **Id** { get; set; }
Managed C++	public: __property **String*** get_**Id**(); public: __property void set_**Id**(**String***);
JScript	public function get **Id**() : **String** public function set **Id**(**String**);

Property Value

System.String.

This property is read/write.

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Scope Property

Note: This documentation is preliminary and is subject to change.

Gets and Sets how a rule is referenced by other rules, and whether or not the rule can be activated or not. See RuleScope for more information.

Definition

Visual Basic	Public Property **Scope** As **RuleScope**
C#	public **RuleScope** **Scope** { get; set; }
Managed C++	public: __property **RuleScope** get_**Scope**(); public: __property void set_**Scope**(**RuleScope**);
JScript	public function get **Scope**() : **RuleScope** public function set **Scope**(**RuleScope**);

Property Value

System.Speech.Srgs.RuleScope.

This property is read/write.

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RuleCollection Class

Note: This documentation is preliminary and is subject to change.

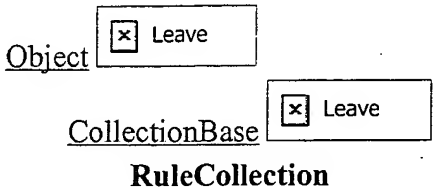
Represents a collection of objects that can be child elements of a Rule class instance.

Definition

Visual Basic	Public Class **RuleCollection** Inherits *CollectionBase*
C#	public class **RuleCollection** : *CollectionBase*
Managed C++	public __gc class **RuleCollection** : public *CollectionBase*
JScript	public class **RuleCollection** extends *CollectionBase*

Members Table

Inheritance Hierarchy



Class Information

Namespace	System.Speech.Srgs
Assembly	System.Speech (system.speech.dll)
Strong Name	System.Speech, Version=6.0.4044.0, Culture=neutral, PublicKeyToken=365143bb27e7ac8b

---

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Add Method

Note: This documentation is preliminary and is subject to change.

Adds a Rule class instance to the RuleCollection.

Definition

Visual Basic

```
Public Function Add( _
   ByVal rule As Rule _
) As Integer
```

C#

```
public int Add(
   Rule rule
);
```

Managed C++

```
public: int Add(
   Rule* rule
);
```

JScript

```
public function Add(
   rule : Rule
) : int;
```

Parameters

rule **System.Speech.Srgs.Rule**. The Rule class instance being added to the RuleCollection.

Return Value

System.Int32.

The RuleCollection index at which the value has been added.

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AddRule Method

Note: This documentation is preliminary and is subject to change.

Adds a new Rule class instance to the RuleCollection.

Overload List

public Rule AddRule ()
public Rule AddRule (String)
public Rule AddRule (Rule)

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Contains Method

Note: This documentation is preliminary and is subject to change.

Determines whether the RuleCollection contains the specified Rule class instance.

Definition

Visual Basic

```
Public Function Contains( _
   ByVal rule As Rule _
) As Boolean
```

C#

```
public bool Contains(
   Rule rule
);
```

Managed C++

```
public: bool Contains(
   Rule* rule
);
```

JScript

```
public function Contains(
   rule : Rule
) : boolean;
```

Parameters

rule **System.Speech.Srgs.Rule**. The Rule class instance being located within the

RuleCollection.

Return Value

System.Boolean. Returns true if the RuleCollection contains the specified Rule class instance; otherwise returns false.

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get_Item Method

Note: This documentation is preliminary and is subject to change.

Overload List

public Rule get_Item (Int32)
public Rule get_Item (String)

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IndexOf Method

Note: This documentation is preliminary and is subject to change.

Searches for the specified Rule class instance and returns the zero-based index of its first occurrence within the RuleCollection.

Overload List

public Int32 IndexOf (Rule)
public Int32 IndexOf (String)

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Insert Method

Note: This documentation is preliminary and is subject to change.

Inserts a Rule class instance into the RuleCollection at the specified index location.

Definition

Visual Basic
```
Public Sub Insert( _
   ByVal index As Integer, _
   ByVal rule As Rule _
)
```

C#
```
public void Insert(
   int index,
   Rule rule
);
```

Managed C++
```
public: void Insert(
   int index,
   Rule* rule
);
```

JScript
```
public function Insert(
   index : int,
   rule : Rule
) : void;
```

Parameters

index **System.Int32**. The zero-based index location where the Rule class instance is to be inserted.

rule **System.Speech.Srgs.Rule**. The Rule class instance being inserted.

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OnClear Method

Note: This documentation is preliminary and is subject to change.

Definition

Visual Basic Overrides Protected Sub **OnClear**()

C# protected override void **OnClear**();

Managed C++ protected: void **OnClear**();

JScript protected override function **OnClear**() : void;

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OnInsert Method

Note: This documentation is preliminary and is subject to change.

Definition

Visual Basic

```
Overrides Protected Sub OnInsert( _
   ByVal index As Integer, _
   ByVal value As Object _
)
```

C#

```
protected override void OnInsert(
   int index,
   object value
);
```

Managed C++

```
protected: void OnInsert(
   int index,
   Object* value
);
```

JScript

```
protected override function OnInsert(
   index : int,
   value : Object
) : void;
```

Parameters

index **System.Int32**.
value **System.Object**.

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OnRemove Method

Note: This documentation is preliminary and is subject to change.

Definition

Visual Basic

```
Overrides Protected Sub OnRemove( _
   ByVal index As Integer, _
   ByVal value As Object _
)
```

C#

```
protected override void OnRemove(
   int index,
   object value
);
```

Managed C++

```
protected: void OnRemove(
   int index,
   Object* value
```

JScript

```
);
protected override function OnRemove(
   index : int,
   value : Object
) : void;
```

Parameters

index **System.Int32.**
value **System.Object.**

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OnSet Method

Note: This documentation is preliminary and is subject to change.

Definition

Visual Basic

```
Overrides Protected Sub OnSet( _
   ByVal index As Integer, _
   ByVal oldValue As Object, _
   ByVal newValue As Object _
)
```

C#

```
protected override void OnSet(
   int index,
   object oldValue,
   object newValue
);
```

Managed C++

```
protected: void OnSet(
   int index,
   Object* oldValue,
   Object* newValue
);
```

JScript

```
protected override function OnSet(
   index : int,
   oldValue : Object,
   newValue : Object
) : void;
```

Parameters

index **System.Int32.**
oldValue **System.Object.**
newValue **System.Object.**

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OnValidate Method

Note: This documentation is preliminary and is subject to change.

Definition

Visual Basic
```
Overrides Protected Sub OnValidate( _
    ByVal rule As Object _
)
```

C#
```
protected override void OnValidate(
    object rule
);
```

Managed C++
```
protected: void OnValidate(
    Object* rule
);
```

JScript
```
protected override function OnValidate(
    rule : Object
) : void;
```

Parameters

rule **System.Object**.

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Remove Method

Note: This documentation is preliminary and is subject to change.

Removes the first occurrence of a specified Rule class instance from the RuleCollection.

Definition

Visual Basic
```
Public Sub Remove( _
    ByVal rule As Rule _
)
```

C#
```
public void Remove(
    Rule rule
);
```

Managed C++
```
public: void Remove(
    Rule* rule
```

```
);
public function Remove(
    rule : Rule
) : void;
```
JScript

Parameters

rule **System.Speech.Srgs.Rule**. The Rule class instance to remove from the RuleCollection.

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RuleCollection Method

Note: This documentation is preliminary and is subject to change.

Initializes a new instance of the RuleCollection and species the owning Grammar class instance.

Definition

```
Public Sub RuleCollection( _
    ByVal owner As SrgsGrammar _
)
```
Visual Basic

```
public RuleCollection(
    SrgsGrammar owner
);
```
C#

```
public: RuleCollection(
    SrgsGrammar* owner
);
```
Managed C++

```
public function RuleCollection(
    owner : SrgsGrammar
);
```
JScript

Parameters

owner **System.Speech.Srgs.SrgsGrammar**. Owning Grammar class instance.

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set_Item Method

Note: This documentation is preliminary and is subject to change.

Overload List

public Void set_Item (Int32, Rule)
public Void set_Item (String, Rule)

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Item Property

Note: This documentation is preliminary and is subject to change.

Retrieves a Rule class instance from the RuleCollection using the specified name.

Overload List

public Rule Item (String)
public Rule Item (Int32)

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RuleElementCollection Class

Note: This documentation is preliminary and is subject to change.

Represents a collection of objects that are valid within a Rule class instance.

Definition

Visual Basic	Public Class **RuleElementCollection** Inherits *CollectionBase*
C#	public class **RuleElementCollection** : *CollectionBase*
Managed C++	public __gc class **RuleElementCollection** : public *CollectionBase*
JScript	public class **RuleElementCollection** extends *CollectionBase*

Members Table

Inheritance Hierarchy

Object Leave
CollectionBase Leave

RuleElementCollection

Class Information

Namespace	System.Speech.Srgs
Assembly	System.Speech (system.speech.dll)
Strong Name	System.Speech, Version=6.0.4044.0, Culture=neutral, PublicKeyToken=365143bb27e7ac8b

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Add Method

Note: This documentation is preliminary and is subject to change.

Adds an Example class instance to the RuleElementCollection.

Overload List

public Int32 Add (Example)
public Int32 Add (Item)
public Int32 Add (OneOf)
public Int32 Add (RuleRef)
public Int32 Add (SpecialRuleRef)
public Int32 Add (Tag)
public Int32 Add (Token)
public Int32 Add (SrgsText)
public Int32 Add (String)

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AddExample Method

Note: This documentation is preliminary and is subject to change.

Adds a Example class instance to the RuleElementCollection.

Overload List

public Void AddExample (Example)
public Example AddExample (String)

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AddItem Method

Note: This documentation is preliminary and is subject to change.

Adds a Item class instance to the RuleElementCollection.

Overload List

public Void AddItem (Item)
public Item AddItem ()
public Item AddItem (String)
public Item AddItem (String, String)
public Item AddItem (String, String, Object)

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AddItems Method

Note: This documentation is preliminary and is subject to change.

Adds two Item class instances to the RuleElementCollection. Both Item class instances contain text.

Overload List

public Item AddItems (String, String)
public Item AddItems (String, String, String)
public Item AddItems (String[])

Remarks

This method is essentially a macro for calling the AddItem method twice.

This method is essentially a macro for calling the AddItem method three times

This method is essentially a macro for calling the AddItem method multiple times.

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AddOneOf Method

Note: This documentation is preliminary and is subject to change.

Adds a OneOf class instance to the RuleElementCollection.

Overload List

public Void AddOneOf (OneOf)
public OneOf AddOneOf ()
public OneOf AddOneOf (String, String)
public OneOf AddOneOf (String, String, String)
public OneOf AddOneOf (String[])
public OneOf AddOneOf (Item[])

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AddOptionalItem Method

Note: This documentation is preliminary and is subject to change.

Adds a new optional Item class instance to the RuleElementCollection.

Overload List

public Item AddOptionalItem ()
public Item AddOptionalItem (String)

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AddRepeatingItem Method

Note: This documentation is preliminary and is subject to change.

Adds an Item class instance to the RuleElementCollection. The Item class instance being added either must be repeated the specified minimum number of times, or can be repeated up to the specified maximum number of times.

Definition

Visual Basic

```
Public Function AddRepeatingItem( _
   ByVal minRepeat As Integer, _
   ByVal maxRepeat As Integer _
) As Item
```

C#

```
public Item AddRepeatingItem(
   int minRepeat,
   int maxRepeat
);
```

Managed C++

```
public: Item* AddRepeatingItem(
   int minRepeat,
   int maxRepeat
);
```

JScript

```
public function AddRepeatingItem(
   minRepeat : int,
   maxRepeat : int
) : Item;
```

Parameters

minRepeat **System.Int32**. Minimum number of times the new Item class instance must be repeated for a successful recognition.

maxRepeat **System.Int32**. Maximum number of times the new Item class instance can be repeated for a successful recognition.

Return Value

System.Speech.Srgs.Item.

Returns the newly added Item class instance.

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AddRuleRef Method

Note: This documentation is preliminary and is subject to change.

Adds a RuleRef class instance to the RuleElementCollection.

Overload List

public Void AddRuleRef (RuleRef)
public RuleRef AddRuleRef (String)
public RuleRef AddRuleRef (Rule)

Remarks

This method can also be used to refer to dictation grammars. The general dictation model is referenced by: AddRuleRef("recognitiontopic:general"); and a specific topic by, for example: AddRuleRef("recognitiontopic:spelling");

If the rule is part of the same grammar, the rule reference is a local reference. If the rule is part of another grammar, the rule reference is automatically determined based on the grammar that the rule comes from.

For example, if the rule is part of a grammar that was loaded with a call to Grammar.Load, the URI specified in that call will be used and the Rule.Id will be used for the local part.The URI will appear in the form: "{0}#{1}", where 0=URI from Grammar.Load, and 1=Rule.Id. Another example is if the rule is part of a grammar that's been built dynamically the rule will automatically be added (at Commit time) to the Grammar that this rule reference is a part of, if it doesn't already appear there.

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AddSpecialRuleRef Method

Note: This documentation is preliminary and is subject to change.

Adds a SpecialRuleRef class instance to the RuleElementCollection.

Definition

Visual Basic

```
Public Sub AddSpecialRuleRef( _
    ByVal specialRuleRef As SpecialRuleRef _
)
```

C#

```
public void AddSpecialRuleRef(
    SpecialRuleRef specialRuleRef
);
```

Managed C++

```
public: void AddSpecialRuleRef(
    SpecialRuleRef* specialRuleRef
);
```

JScript

```
public function AddSpecialRuleRef(
    specialRuleRef : SpecialRuleRef
) : void;
```

Parameters

specialRuleRef **System.Speech.Srgs.SpecialRuleRef**. The SpecialRuleRef class instance being added to the RuleElementCollection.

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AddTag Method

Note: This documentation is preliminary and is subject to change.

Adds a Tag class instance to the RuleElementCollection.

Overload List

public Void AddTag (Tag)
public Tag AddTag (String)

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AddToken Method

Note: This documentation is preliminary and is subject to change.

Adds a Token class instance to the RuleElementCollection.

Overload List

public Void AddToken (Token)
public Token AddToken (String)
public Token AddToken (String, String)

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Contains Method

Note: This documentation is preliminary and is subject to change.

Determines whether the RuleElementCollection contains the specified IRuleElement.

Definition

Visual Basic

```
Public Function Contains( _
   ByVal element As IRuleElement _
) As Boolean
```

C#

```
public bool Contains(
   IRuleElement element
);
```

```
Managed C++
public: bool Contains(
    IRuleElement* element
);

JScript
public function Contains(
    element : IRuleElement
) : boolean;
```

Parameters

element **System.Speech.Srgs.IRuleElement**. The IRuleElement being located within the RuleElementCollection.

Return Value

System.Boolean.

Returnstrue if the RuleElementCollection contains the specified IRuleElement object; otherwise returns false.

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IndexOf Method

Note: This documentation is preliminary and is subject to change.

Searches for the specified IRuleElement and returns the zero-based index of its first occurrence within the RuleElementCollection.

Definition

```
Visual Basic
Public Function IndexOf( _
    ByVal element As IRuleElement _
) As Integer

C#
public int IndexOf(
    IRuleElement element
);

Managed C++
public: int IndexOf(
    IRuleElement* element
);

JScript
public function IndexOf(
    element : IRuleElement
) : int;
```

Parameters

element **System.Speech.Srgs.IRuleElement**. The IRuleElement being searched for within the RuleElementCollection.

Return Value

System.Int32.

Returns the zero-based index of the first occurrence of the IRuleElement object within the RuleElementCollection, if found; otherwise returns -1.

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Insert Method

Note: This documentation is preliminary and is subject to change.

Inserts a new IRuleElement into the RuleElementCollection at the specified index location.

Definition

Visual Basic

```
Public Sub Insert( _
   ByVal index As Integer, _
   ByVal element As IRuleElement _
)
```

C#

```
public void Insert(
   int index,
   IRuleElement element
);
```

Managed C++

```
public: void Insert(
   int index,
   IRuleElement* element
);
```

JScript

```
public function Insert(
   index : int,
   element : IRuleElement
) : void;
```

Parameters

index **System.Int32**. The zero-based index location where the IRuleElement is being inserted.

element **System.Speech.Srgs.IRuleElement**. The new IRuleElement being inserted.

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OnClear Method

Note: This documentation is preliminary and is subject to change.

Definition

Visual Basic Overrides Protected Sub **OnClear**()
C# protected override **void OnClear**();
Managed C++ protected: **void OnClear**();
JScript protected override function **OnClear**() : **void**;

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OnInsert Method

Note: This documentation is preliminary and is subject to change.

Definition

Visual Basic

```
Overrides Protected Sub OnInsert( _
   ByVal index As Integer, _
   ByVal value As Object _
)
```

C#

```
protected override void OnInsert(
   int index,
   object value
);
```

Managed C++

```
protected: void OnInsert(
   int index,
   Object* value
);
```

JScript

```
protected override function OnInsert(
   index : int,
   value : Object
) : void;
```

Parameters

index **System.Int32**.
value **System.Object**.

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OnRemove Method

Note: This documentation is preliminary and is subject to change.

Definition

Visual Basic

```
Overrides Protected Sub OnRemove( _
   ByVal index As Integer, _
   ByVal value As Object _
)
```

C#

```
protected override void OnRemove(
   int index,
   object value
);
```

Managed C++

```
protected: void OnRemove(
   int index,
   Object* value
);
```

JScript

```
protected override function OnRemove(
   index : int,
   value : Object
) : void;
```

Parameters

index **System.Int32**.
value **System.Object**.

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OnSet Method

Note: This documentation is preliminary and is subject to change.

Definition

Visual Basic

```
Overrides Protected Sub OnSet( _
   ByVal index As Integer, _
   ByVal oldValue As Object, _
   ByVal newValue As Object _
)
```

C#

```
protected override void OnSet(
   int index,
   object oldValue,
```

```
                object newValue
            );
            protected: void OnSet(
                int index,
Managed C++     Object* oldValue,
                Object* newValue
            );
            protected override function OnSet(
                index : int,
  JScript       oldValue : Object,
                newValue : Object
            ) : void;
```

Parameters

index **System.Int32.**
oldValue **System.Object.**
newValue **System.Object.**

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OnValidate Method

Note: This documentation is preliminary and is subject to change.

Definition

```
            Overrides Protected Sub OnValidate( _
Visual Basic    ByVal element As Object _
            )
            protected override void OnValidate(
    C#          object element
            );
            protected: void OnValidate(
Managed C++     Object* element
            );
            protected override function OnValidate(
  JScript       element : Object
            ) : void;
```

Parameters

element **System.Object.**

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Remove Method

Note: This documentation is preliminary and is subject to change.

Removes the first occurrence of a specified IRuleElement from the RuleElementCollection.

Definition

Visual Basic
```
Public Sub Remove( _
   ByVal element As IRuleElement _
)
```

C#
```
public void Remove(
   IRuleElement element
);
```

Managed C++
```
public: void Remove(
   IRuleElement* element
);
```

JScript
```
public function Remove(
   element : IRuleElement
) : void;
```

Parameters

element **System.Speech.Srgs.IRuleElement**. The IRuleElement being removed from the RuleElementCollection.

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RuleElementCollection Method

Note: This documentation is preliminary and is subject to change.

Creates a new RuleElementCollection and identifies its owning Rule class instance.

Definition

Visual Basic
```
Public Sub RuleElementCollection( _
   ByVal owner As Rule _
)
```

C#
```
public RuleElementCollection(
   Rule owner
);
```

```
Managed C++
public: RuleElementCollection(
   Rule* owner
);

JScript
public function RuleElementCollection(
   owner : Rule
);
```

Parameters

owner **System.Speech.Srgs.Rule**. Name of the Rule class instance associated with the RuleElementCollection.

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Item Property

Note: This documentation is preliminary and is subject to change.

Retrieves an IRuleElement from the RuleElementCollection using a specified index value.

Definition

```
Visual Basic
Public Property Item( _
   ByVal index As Integer _
) As IRuleElement

C#
public IRuleElement this[
   int index
] { get; set; }

Managed C++
public: __property IRuleElement* get_Item(
   int index
);
public: __property void set_Item(
   int index,
   IRuleElement*
);

JScript
In JScript, you can use indexed properties, but you cannot define your own.
```

Property Value

System.Speech.Srgs.IRuleElement.

This property is read/write.

Parameters

index **System.Int32**. Index value of the IRuleElement within the RuleElementCollection.

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RuleRef Class

Note: This documentation is preliminary and is subject to change.

Example represents the World Wide Web Consortium (W3C) Speech Recognition Grammar Specification (SRGS) ruleref element. See http://www.w3.org/TR/speech-grammar/ for more information.

Definition

Visual Basic	Public Class **RuleRef** Inherits *Object* Implements *IItemElement*, *IRuleElement*
C#	public class **RuleRef** : *Object*, IItemElement, IRuleElement
Managed C++	public __gc class **RuleRef** : public *Object*, IItemElement, IRuleElement
JScript	public class **RuleRef** extends *Object* implements *IRuleElement*, *IItemElement*

Members Table

Inheritance Hierarchy

Object Leave

RuleRef

Class Information

Namespace	System.Speech.Srgs
Assembly	System.Speech (system.speech.dll)
Strong Name	System.Speech, Version=6.0.4044.0, Culture=neutral, PublicKeyToken=365143bb27e7ac8b

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RuleRef Method

Note: This documentation is preliminary and is subject to change.

Class constructor

Overload List

public RuleRef ()
public RuleRef (String)
public RuleRef (Rule)

Remarks

If the rule is part of the same grammar, the rule reference is a local reference. If the rule is part of another grammar, the rule reference is automatically determined based on the grammar that the rule comes from.

For example, if the rule is part of a grammar that was loaded with a call to Grammar.Load, the URI specified in that call will be used and the Rule.Id will be used for the local part.

For example the URI will appear in the form: "{0}#{1}", where 0=URI from Grammar.Load, and 1=Rule.Id. Another example is if the rule is part of a grammar that's been built dynamically the rule will automatically be added (at Commit time) to the Grammar that this rule reference is a part of, if it doesn't already appear there.

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ToString Method

Note: This documentation is preliminary and is subject to change.

Definition

Visual Basic	Overrides Public Function **ToString**() As **String**
C#	public override **string ToString**();
Managed C++	public: **String*** **ToString**();
JScript	public override function **ToString**() : **String**;

Return Value

System.String.

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Dictation Property

Note: This documentation is preliminary and is subject to change.

The Dictation SpecialRuleRef defines a rule that may match speech that matches the associated Dictation topic specified in the containing Grammar object.

Definition

Visual Basic	Public Shared ReadOnly Property **Dictation** As **RuleRef**
C#	public static **RuleRef** **Dictation** { get; }
Managed C++	public: __property static **RuleRef*** get_**Dictation**();
JScript	public static function get **Dictation**() : **RuleRef**

Property Value

System.Speech.Srgs.RuleRef.

This property is read-only.

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Uri Property

Note: This documentation is preliminary and is subject to change.

Gets and sets the universal resource indicator (URI) of the rule to which this RuleRef object refers.

Definition

Visual Basic	Public Property **Uri** As **String**
C#	public **string** **Uri** { get; set; }
Managed C++	public: __property **String*** get_**Uri**(); public: __property void set_**Uri**(**String***);
JScript	public function get **Uri**() : **String** public function set **Uri**(**String**);

Property Value

System.String.

This property is read/write.

Remarks

This can also be used to refer to dictation grammars. The general dictation model is referenced by: AddRuleRef("recognitiontopic:general"); and a specific topic by, for example: AddRuleRef("recognitiontopic:spelling");

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SpecialRuleRef Class

Note: This documentation is preliminary and is subject to change.

SpecialRuleRef class instance allow grammars based on context-free grammars (CFG) to have powerful additional features, such as transitions into dictation (both recognized or not recognized) and word seqeuences from SAPI 5.0.

Definition

Visual Basic	Public Class **SpecialRuleRef** Inherits *Object* Implements *IItemElement*, *IRuleElement*
C#	public class **SpecialRuleRef** : *Object*, IItemElement, IRuleElement
Managed C++	public __gc class **SpecialRuleRef** : public *Object*, IItemElement, IRuleElement
JScript	public class **SpecialRuleRef** extends *Object* implements *IRuleElement*, *IItemElement*

Members Table

Inheritance Hierarchy

Object

SpecialRuleRef

Class Information

Namespace	System.Speech.Srgs
Assembly	System.Speech (system.speech.dll)
Strong Name	System.Speech, Version=6.0.4044.0, Culture=neutral, PublicKeyToken=365143bb27e7ac8b

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Garbage Property

Note: This documentation is preliminary and is subject to change.

Gets the Garbage SpecialRuleRef that specifies a rule that may match any speech up until the next rule match, the next token or until the end of spoken input.

Definition

Visual Basic	Public Shared ReadOnly Property **Garbage** As **SpecialRuleRef**
C#	public static **SpecialRuleRef** **Garbage** { get; }
Managed C++	public: __property static **SpecialRuleRef*** get_**Garbage**();
JScript	public static function get **Garbage**() : **SpecialRuleRef**

Property Value

System.Speech.Srgs.SpecialRuleRef.

This property is read-only.

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Null Property

Note: This documentation is preliminary and is subject to change.

Gets The Null SpecialRuleRef that specifies a rule that is automatically matched without the user speaking any word.

Definition

Visual Basic	Public Shared ReadOnly Property **Null** As **SpecialRuleRef**
C#	public static **SpecialRuleRef** **Null** { get; }
Managed C++	public: __property static **SpecialRuleRef*** get_**Null**();
JScript	public static function get **Null**() : **SpecialRuleRef**

Property Value

System.Speech.Srgs.SpecialRuleRef.

This property is read-only.

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Type Property

Note: This documentation is preliminary and is subject to change.

Gets and sets the type of a SpecialRuleRef class instance that specifies the behavior of the reference.

Definition

Visual Basic	Public Property **Type** As **SpecialRuleRefType**
C#	public **SpecialRuleRefType** **Type** { get; set; }
Managed C++	public: __property **SpecialRuleRefType** get_**Type**(); public: __property void set_**Type**(**SpecialRuleRefType**);
JScript	public function get **Type**() : **SpecialRuleRefType** public function set **Type**(**SpecialRuleRefType**);

Property Value

System.Speech.Srgs.SpecialRuleRefType.

This property is read/write.

Remarks

The type of the special rule reference specifies the behavior of the reference. For example, a special rule reference with a type of SpecialRuleRefType.Dictation, when included in a Rule, allows the rule to also include dictation as part of its context-free grammar recognition.

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Void Property

Note: This documentation is preliminary and is subject to change.

Gets the Void SpecialRuleRef that specifies a rule that can never be spoken. Inserting Void into a sequence automatically makes that sequence unspeakable.

Definition

Visual Basic	Public Shared ReadOnly Property **Void** As **SpecialRuleRef**
C#	public static **SpecialRuleRef** **Void** { get; }

Managed C++	public: __property static **SpecialRuleRef*** get_**Void**();
JScript	public static function get **Void**() : **SpecialRuleRef**

Property Value

System.Speech.Srgs.SpecialRuleRef.

This property is read-only.

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WordSequence Property

Note: This documentation is preliminary and is subject to change.

Gets the WordSequence SpecialRuleRef that species a rule that may match recognized speech from an assosciated text buffer, or word sequence, on the containing Grammar class instance.

Definition

Visual Basic	Public Shared ReadOnly Property **WordSequence** As **SpecialRuleRef**
C#	public static **SpecialRuleRef WordSequence** { get; }
Managed C++	public: __property static **SpecialRuleRef*** get_**WordSequence**();
JScript	public static function get **WordSequence**() : **SpecialRuleRef**

Property Value

System.Speech.Srgs.SpecialRuleRef.

This property is read-only.

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SrgsGrammar Class

Note: This documentation is preliminary and is subject to change.

Represents the logical housing for individual rules and dictation grammars.

Definition

Visual Basic	Public Class **SrgsGrammar**

Inherits *Grammar*

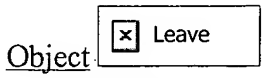
C# public class **SrgsGrammar** : *Grammar*

Managed C++ public __gc class **SrgsGrammar** : public *Grammar*

JScript public class **SrgsGrammar** extends *Grammar*

Members Table

Inheritance Hierarchy



Object

Grammar

SrgsGrammar

Class Information

Namespace System.Speech.Srgs

Assembly System.Speech (system.speech.dll)

Strong Name System.Speech, Version=6.0.4044.0, Culture=neutral, PublicKeyToken=365143bb27e7ac8b

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Commit Method

Note: This documentation is preliminary and is subject to change.

Commits any changes to this SrgsGrammar class instance to the underlying Recognizer.

Definition

Visual Basic Public Sub **Commit**()

C# public **void Commit**();

Managed C++ public: **void Commit**();

JScript public function **Commit**() : **void**;

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GetXml Method

Note: This documentation is preliminary and is subject to change.

Gets the markup representing this SrgsGrammar class instance.

Definition

```
Visual Basic  Public Function GetXml() As String
C#            public string GetXml();
Managed C++   public: String* GetXml();
JScript       public function GetXml() : String;
```

Return Value

System.String.

Returns the markup representing the SrgsGrammar class instance.

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Initialize Method

Note: This documentation is preliminary and is subject to change.

Initializes an SrgsGrammar object from an input/output stream.

Definition

```
Visual Basic  Public Sub Initialize( _
                ByVal stream As Stream _
              )
C#            public void Initialize(
                Stream stream
              );
Managed C++   public: void Initialize(
                Stream* stream
              );
JScript       public function Initialize(
                stream : Stream
              ) : void;
```

Parameters

stream **System.IO.Stream**. Stream from which to load and initialize the SrgsGrammar object.

Remarks

The grammar must be loaded into the recognizer by calling SrgsGrammar::Commit();

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Load Method

Note: This documentation is preliminary and is subject to change.

Loads an SrgsGrammar class instance from an input/output stream and optionally initializes its members.

Overload List

public Void Load (Stream, Boolean)
public Void Load (String, Boolean)
public Void Load (Stream)
public Void Load (String)

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Save Method

Note: This documentation is preliminary and is subject to change.

Saves an SrgsGrammar class instance to the specified universal resource identifier (URI).

Overload List

public Void Save (String)
public Void Save (Stream)

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SrgsGrammar Method

Note: This documentation is preliminary and is subject to change.

Creates a new SrgsGrammar class instance.

Overload List

public SrgsGrammar ()
public SrgsGrammar (String)
public SrgsGrammar (IRecognizer)

Remarks

The SrgsGrammar object is assigned to the default GrammarGroup for the specified Recognizer.

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ToString Method

Note: This documentation is preliminary and is subject to change.

Definition

Visual Basic	Overrides Public Function **ToString**() As **String**
C#	public override **string ToString**();
Managed C++	public: **String*** **ToString**();
JScript	public override function **ToString**() : **String**;

Return Value

System.String.

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Language Property

Note: This documentation is preliminary and is subject to change.

Gets and sets the language of the SrgsGrammar class instance(xml:lang).

Definition

Visual Basic	Public Property **Language** As **CultureInfo Class**
C#	public **CultureInfo Class Language** { get; set; }
Managed C++	public: __property **CultureInfo Class*** get_**Language**(); public: __property void set_**Language**(**CultureInfo Class***);
JScript	public function get **Language**() : **CultureInfo Class** public function set **Language**(**CultureInfo Class**);

Property Value

System.Globalization.CultureInfo.

This property is read/write.

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Mode Property

Note: This documentation is preliminary and is subject to change.

Gets and sets the SrgsGrammar grammar mode as either Voice or dual tone, multi-frequency (DTMF).

Definition

Visual Basic	Public Property **Mode** As **GrammarMode**
C#	public **GrammarMode** **Mode** { get; set; }
Managed C++	public: __property **GrammarMode** get_**Mode**(); public: __property void set_**Mode**(**GrammarMode**);
JScript	public function get **Mode**() : **GrammarMode** public function set **Mode**(**GrammarMode**);

Property Value

System.Speech.Srgs.GrammarMode.

This property is read/write.

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Root Property

Note: This documentation is preliminary and is subject to change.

Gets and sets the root rule of the SrgsGrammar class instance (srgs:root).

Definition

Visual Basic	Public Property **Root** As **Rule**
C#	public **Rule** **Root** { get; set; }
Managed C++	public: __property **Rule*** get_**Root**(); public: __property void set_**Root**(**Rule***);

JScript	public function get **Root**() : **Rule** public function set **Root**(**Rule**);

Property Value

System.Speech.Srgs.Rule.

This property is read/write.

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Rules Property

Note: This documentation is preliminary and is subject to change.

Gets the collection of rules that this SrgsGrammar class instance contains.

Definition

Visual Basic	Public ReadOnly Property **Rules** As **RuleCollection**
C#	public **RuleCollection** **Rules** { get; }
Managed C++	public: __property **RuleCollection*** get_**Rules**();
JScript	public function get **Rules**() : **RuleCollection**

Property Value

System.Speech.Srgs.RuleCollection.

This property is read-only.

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TagFormat Property

Note: This documentation is preliminary and is subject to change.

Gets and sets the format of the SrgsGrammar class instance Tag class instance (srgs:tag-format).

Definition

Visual Basic	Public Property **TagFormat** As **TagFormat**
C#	public **TagFormat** **TagFormat** { get; set; }

Managed C++	public: __property **TagFormat** get_**TagFormat**(); public: __property void set_**TagFormat**(**TagFormat**);
JScript	public function get **TagFormat**() : **TagFormat** public function set **TagFormat**(**TagFormat**);

Property Value

System.Speech.Srgs.TagFormat.

This property is read/write.

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XmlBase Property

Note: This documentation is preliminary and is subject to change.

Gets and sets the base universal resource identifier (URI) of the SrgsGrammar class instance (xml:base).

Definition

Visual Basic	Public Property **XmlBase** As **String**
C#	public **string** **XmlBase** { get; set; }
Managed C++	public: __property **String*** get_**XmlBase**(); public: __property void set_**XmlBase**(**String***);
JScript	public function get **XmlBase**() : **String** public function set **XmlBase**(**String**);

Property Value

System.String.

This property is read/write.

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SrgsText Class

Note: This documentation is preliminary and is subject to change.

Represents text content in Speech Recognition Grammar Specification (SRGS) markup.

Definition

Visual Basic	Public Class **SrgsText** Inherits *Object* Implements *IItemElement*, *IRuleElement*
C#	public class **SrgsText** : *Object*, IItemElement, IRuleElement
Managed C++	public __gc class **SrgsText** : public *Object*, IItemElement, IRuleElement
JScript	public class **SrgsText** extends *Object* implements *IRuleElement*, *IItemElement*

Members Table

Inheritance Hierarchy

Object Leave

SrgsText

Class Information

Namespace	System.Speech.Srgs
Assembly	System.Speech (system.speech.dll)
Strong Name	System.Speech, Version=6.0.4044.0, Culture=neutral, PublicKeyToken=365143bb27e7ac8b

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SrgsText Method

Note: This documentation is preliminary and is subject to change.

Initializes a new instance of the SrgsText class.

Overload List

public SrgsText ()
public SrgsText (String)

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Text Property

Note: This documentation is preliminary and is subject to change.

Gets and sets the text of the SrgsText class instance.

Definition

Visual Basic	Public Property **Text** As **String**
C#	public **string Text** { get; set; }
Managed C++	public: __property **String*** get_**Text**(); public: __property void set_**Text**(**String***);
JScript	public function get **Text**() : **String** public function set **Text**(**String**);

Property Value

System.String.

This property is read/write.

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Tag Class

Note: This documentation is preliminary and is subject to change.

Represents the World Wide Web Consortium (W3C) Speech Recognition Grammar Specification (SRGS) tag element. See http://www.w3.org/TR/speech-grammar/ for more information.

Definition

Visual Basic	Public Class **Tag** Inherits *Object* Implements *IItemElement*, *IRuleElement*
C#	public class **Tag** : *Object*, IItemElement, IRuleElement
Managed C++	public __gc class **Tag** : public *Object*, IItemElement, IRuleElement
JScript	public class **Tag** extends *Object* implements *IRuleElement*, *IItemElement*

Members Table

Inheritance Hierarchy

Object Leave

Tag

Class Information

Namespace	System.Speech.Srgs
Assembly	System.Speech (system.speech.dll)
Strong Name	System.Speech, Version=6.0.4044.0, Culture=neutral, PublicKeyToken=365143bb27e7ac8b

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Tag Method

Note: This documentation is preliminary and is subject to change.

Initializes a new instance of the Tag class.

Overload List

public Tag ()
public Tag (String)

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ToString Method

Note: This documentation is preliminary and is subject to change.

Definition

Visual Basic	Overrides Public Function **ToString**() As **String**
C#	public override **string ToString**();
Managed C++	public: **String*** **ToString**();
JScript	public override function **ToString**() : **String**;

Return Value

System.String.

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Text Property

Note: This documentation is preliminary and is subject to change.

Gets and sets the text of the Tag class instance.

Definition

Visual Basic	Public Property **Text** As **String**
C#	public **string Text** { get; set; }
Managed C++	public: __property **String*** get_**Text**(); public: __property void set_**Text**(**String***);
JScript	public function get **Text**() : **String** public function set **Text**(**String**);

Property Value

System.String.

This property is read/write.

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Token Class

Note: This documentation is preliminary and is subject to change.

Token represents the World Wide Web Consortium (W3C) Speech Recognition Grammar Specification (SRGS) token element. See http://www.w3.org/TR/speech-grammar/ for more information.

Definition

Visual Basic	Public Class **Token** Inherits *Object* Implements *IItemElement*, *IRuleElement*
C#	public class **Token** : *Object*, IItemElement, IRuleElement
Managed C++	public __gc class **Token** : public *Object*, IItemElement, IRuleElement
JScript	public class **Token** extends *Object* implements *IRuleElement*, *IItemElement*

Members Table

Inheritance Hierarchy

Token

Remarks

Note that if multiple words are stored in a single Token, each is treated internally, and in the result, as a different token.

Class Information

Namespace	System.Speech.Srgs
Assembly	System.Speech (system.speech.dll)
Strong Name	System.Speech, Version=6.0.4044.0, Culture=neutral, PublicKeyToken=365143bb27e7ac8b

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Token Method

Note: This documentation is preliminary and is subject to change.

Initializes a new instance of the Token class.

Overload List

public Token ()
public Token (String)
public Token (String, String)

Remarks

Creates a Token object with properties not yet set. The text property must be set prior to committing the associated rule(s) to the Grammar.

Creates a Token object with the Text property initially set to the text param passed in.

Creates a Token class instance with the Text property initially set to the text param passed in.

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ToString Method

Note: This documentation is preliminary and is subject to change.

Definition

Visual Basic	Overrides Public Function **ToString**() As **String**
C#	public override **string ToString**();
Managed C++	public: **String*** **ToString**();
JScript	public override function **ToString**() : **String**;

Return Value

System.String.

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Pronunciation Property

Note: This documentation is preliminary and is subject to change.

Gets and sets pronunciation for the token.

Definition

Visual Basic	Public Property **Pronunciation** As **String**
C#	public **string Pronunciation** { get; set; }
Managed C++	public: __property **String*** get_**Pronunciation**(); public: __property void set_**Pronunciation**(**String***);
JScript	public function get **Pronunciation**() : **String** public function set **Pronunciation**(**String**);

Property Value

System.String.

This property is read/write.

Remarks

This pronunciation is an extension to the World Wide Web Consortium (W3C) Speech

Recognition Grammar Specification (SRGS) format using the following namespace: http://schemas.microsoft.com/Speech/2002/06/SRGSExtensions

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Text Property

Note: This documentation is preliminary and is subject to change.

Gets and sets the text contained within the Token class instance.

Definition

Visual Basic	Public Property **Text** As **String**
C#	public **string Text** { get; set; }
Managed C++	public: __property **String*** get_**Text**(); public: __property void set_**Text**(**String***);
JScript	public function get **Text**() : **String** public function set **Text**(**String**);

Property Value

System.String.

This property is read/write.

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IItemElement Interface

Note: This documentation is preliminary and is subject to change.

The IItemElement interface is an empty interface implemented by all Speech Recognition Grammar Specification (SRGS) elements that can be a child element of the item element. (Item, OneOf, RuleRef, SpecialRuleRef, Tag, Token, SrgsText)

Definition

Visual Basic	Public Interface **IItemElement**
C#	public interface **IItemElement**
Managed C++	public __gc __interface **IItemElement**
JScript	public interface **IItemElement**

Interface Information

Namespace	System.Speech.Srgs
Assembly	System.Speech (system.speech.dll)
Strong Name	System.Speech, Version=6.0.4044.0, Culture=neutral, PublicKeyToken=365143bb27e7ac8b

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IRuleElement Interface

Note: This documentation is preliminary and is subject to change.

The IRuleElement interface is an empty interface implemented by all Speech Recognition Grammar Specification (SRGS) elements that can be a child element of the Rule element. (Example, Item, OneOf, RuleRef, SpecialRuleRef, Tag, Token, SrgsText)

Definition

Visual Basic	Public Interface **IRuleElement**
C#	public interface **IRuleElement**
Managed C++	public __gc __interface **IRuleElement**
JScript	public interface **IRuleElement**

Interface Information

Namespace	System.Speech.Srgs
Assembly	System.Speech (system.speech.dll)
Strong Name	System.Speech, Version=6.0.4044.0, Culture=neutral, PublicKeyToken=365143bb27e7ac8b

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GrammarMode Enumeration

Note: This documentation is preliminary and is subject to change.

Identifies the grammar mode as either Voice or dual tone, multi-frequency (DTMF).

Definition

Visual Basic	Public Enum **GrammarMode**

C#	public enum **GrammarMode**
Managed C++	__value public enum **GrammarMode**
JScript	public enum **GrammarMode**

Constants

Constant Name	Description
Voice	Specifies voice grammar mode.
Dtmf	Specifies dual tone, multi-frequency (DTMF) grammar mode.

Enumeration Information

Namespace	System.Speech.Srgs
Assembly	System.Speech (system.speech.dll)
Strong Name	System.Speech, Version=6.0.4044.0, Culture=neutral, PublicKeyToken=365143bb27e7ac8b

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RuleScope Enumeration

Note: This documentation is preliminary and is subject to change.

RuleScope specifies how a rule behaves. The behavior includes whether or not it can be referenced by other rules and whether or not the rule can be activated.

Definition

Visual Basic	Public Enum **RuleScope**
C#	public enum **RuleScope**
Managed C++	__value public enum **RuleScope**
JScript	public enum **RuleScope**

Constants

Constant Name	Description
Public	Specifies a Public Rule. Rules identified as Public can be both activated as well as referenced by rules in other grammars
Private	Specifies a Private rule. Rules identified as Private cannot be activated, but they can be referenced by rules in the same grammar

Enumeration Information

Namespace	System.Speech.Srgs
Assembly	System.Speech (system.speech.dll)
Strong Name	System.Speech, Version=6.0.4044.0, Culture=neutral, PublicKeyToken=365143bb27e7ac8b

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SpecialRuleRefType Enumeration

Note: This documentation is preliminary and is subject to change.

Special rule references allow grammars based on context-free grammars (CFG) to have powerful additional features, such as transitions into dictation (both recognized or not recognized) and word sequences from SAPI 5.0.

Definition

Visual Basic	Public Enum **SpecialRuleRefType**
C#	public enum **SpecialRuleRefType**
Managed C++	__value public enum **SpecialRuleRefType**
JScript	public enum **SpecialRuleRefType**

Constants

Constant Name	Description
Null	Specifies a rule that is automatically matched, that is, matched without the user speaking any word.
Void	Specifies a rule that can never be spoken. Inserting Void into a sequence automatically makes that sequence unspeakable.
Garbage	Specifies a rule that may match any speech up until the next rule match, the next token, or until the end of spoken input. Designed for applications that would like to recognize some phrases without failing due to irrelevant, or ignorable words.
WordSequence	Specifies a rule that may match recognized speech from an associated text buffer, or word sequence, on the containing Grammar object.

Enumeration Information

Namespace	System.Speech.Srgs
Assembly	System.Speech (system.speech.dll)
Strong Name	System.Speech, Version=6.0.4044.0, Culture=neutral, PublicKeyToken=365143bb27e7ac8b

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TagFormat Structure

Note: This documentation is preliminary and is subject to change.

TagFormat extensible enumeration.

Definition

Visual Basic	Public Structure TagFormat
C#	public struct TagFormat
Managed C++	public __value struct TagFormat
JScript	In JScript, you can use structures, but you cannot define your own.

Members Table

Structure Information

Namespace	System.Speech.Srgs
Assembly	System.Speech (system.speech.dll)
Strong Name	System.Speech, Version=6.0.4044.0, Culture=neutral, PublicKeyToken=365143bb27e7ac8b

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Equals Method

Note: This documentation is preliminary and is subject to change.

Compares the TagFormat class instance against another object.

Overload List

public override Boolean Equals (Object)
public override Boolean Equals (TagFormat)

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GetHashCode Method

Note: This documentation is preliminary and is subject to change.

Creates a hash code from the TagFormat class instance string.

Definition

Visual Basic Overrides Public Function **GetHashCode**() As **Integer**
C# public override **int GetHashCode**();
Managed C++ public: **int GetHashCode**();
JScript public override function **GetHashCode**() : **int**;

Return Value

System.Int32.

Returns the hash value of the TagFormat class instance.

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op_Equality Method

Note: This documentation is preliminary and is subject to change.

TagFormat class equality comparison operator.

Definition

Visual Basic
```
Public Shared Function op_Equality( _
   ByVal a As TagFormat, _
   ByVal b As TagFormat _
) As Boolean
```

C#
```
public static bool op_Equality(
   TagFormat a,
   TagFormat b
);
```

Managed C++
```
public: static bool op_Equality(
   TagFormat a,
   TagFormat b
);
```

JScript
```
public static function op_Equality(
   a : TagFormat,
   b : TagFormat
) : boolean;
```

Parameters

a **System.Speech.Srgs.TagFormat**. First TagFormat class instance being compared.
b **System.Speech.Srgs.TagFormat**. Second TagFormat class instance being compared.

Return Value

System.Boolean.

None.

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op_Inequality Method

Note: This documentation is preliminary and is subject to change.

TagFormat class inequality comparison operator.

Definition

Visual Basic

```
Public Shared Function op_Inequality( _
   ByVal a As TagFormat, _
   ByVal b As TagFormat _
) As Boolean
```

C#

```
public static bool op_Inequality(
   TagFormat a,
   TagFormat b
);
```

Managed C++

```
public: static bool op_Inequality(
   TagFormat a,
   TagFormat b
);
```

JScript

```
public static function op_Inequality(
   a : TagFormat,
   b : TagFormat
) : boolean;
```

Parameters

a **System.Speech.Srgs.TagFormat**. First TagFormat class instance being compared.
b **System.Speech.Srgs.TagFormat**. Second TagFormat class instance being compared.

Return Value

System.Boolean.

None.

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TagFormat Method

Note: This documentation is preliminary and is subject to change.

Initializes a new instance of the TagFormat class.

Definition

```
                Public Sub TagFormat( _
Visual Basic        ByVal tagFormat As String _
                )
                public TagFormat(
    C#              string tagFormat
                );
                public: TagFormat(
Managed C++         String* tagFormat
                );
                public function TagFormat(
  JScript           tagFormat : String
                );
```

Parameters

tagFormat **System.String**. Format of the new TagFormat class instance.

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ToString Method

Note: This documentation is preliminary and is subject to change.

Creates a string representation of this TagFormat class instance.

Definition

```
Visual Basic  Overrides Public Function ToString() As String
    C#        public override string ToString();
```

Managed C++ public: String* **ToString**();
JScript public override function **ToString**() : String;

Return Value

System.String.

Returns the string representation of the TagFormat class instance.

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DefaultSemantics Property

Note: This documentation is preliminary and is subject to change.

Default tag format

Definition

Visual Basic Public Shared ReadOnly Property **DefaultSemantics** As **TagFormat**
C# public static **TagFormat** **DefaultSemantics** { get; }
Managed C++ public: __property static **TagFormat** get_**DefaultSemantics**();
JScript public static function get **DefaultSemantics**() : **TagFormat**

Property Value

System.Speech.Srgs.TagFormat.

This property is read-only.

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MSSapiProperties Property

Note: This documentation is preliminary and is subject to change.

Sets the tag format to those described by the Microsoft Speech Applications Programming Interface (MS SAPI) Properties 1.0.

Definition

Visual Basic Public Shared ReadOnly Property **MSSapiProperties** As **TagFormat**

C#	public static **TagFormat MSSapiProperties** { get; }
Managed C++	public: __property static **TagFormat** get_**MSSapiProperties**();
JScript	public static function get **MSSapiProperties**() : **TagFormat**

Property Value

System.Speech.Srgs.TagFormat.

This property is read-only.

Examples

The following code specifies tag format to be as described by MS SAPI properties.

```
// - Add the rule to the grammar and set it as the Root rule.ChangeColorGrammar

' - Add the rule to the grammar and set it as the Root rule.ChangeColorGrammar.
```

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MSSemanticInterpretation Property

Note: This documentation is preliminary and is subject to change.

Sets the tag format to those described by the Microsoft Semantic Interpretation 1.0.

Definition

Visual Basic	Public Shared ReadOnly Property **MSSemanticInterpretation** As **TagFormat**
C#	public static **TagFormat MSSemanticInterpretation** { get; }
Managed C++	public: __property static **TagFormat** get_**MSSemanticInterpretation**();
JScript	public static function get **MSSemanticInterpretation**() : **TagFormat**

Property Value

System.Speech.Srgs.TagFormat.

This property is read-only.

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System.Speech.Synthesis

Note: This documentation is preliminary and is subject to change.

The following tables list the members exposed by the System.Speech.Synthesis namespace.

Classes

AudioLevelChangedEventArgs	Provides data for the AudioLevelChanged event.
BookmarkDetectedEventArgs	Error handler
SpeakCompletedEventArgs	[To be provided]
SpeakProgressChangedEventArgs	[To be supplied.]
SpeakToken	Represents a single speak operation.
SpeechSynthesizer	[To be supplied.]
SynthesisEventArgs	Event handler for SpeakStarting and future events. Base class for all Speech Synthesis events.
SynthesizePhonemeEventArgs	[To be supplied.]
SynthesizeVisemeEventArgs	[To be supplied.]
Voice	[To be supplied.]
VoiceAttributes	Represents the attributes of the text-to-speech (TTS) voice.

Enumerations

SpeakPriority	Indicates the speaking priority
SpeechUnit	Specifies the unit of speech.
VoiceGender	Identifies the gender of the voice used in text-to-speech synthesis.

Structures

SpeakMediaType SpeakMediaType identifies the format of the content to be spoken.

Delegates

AudioLevelChangedEventHandler	Represents the method that will handle the AudioLevelChanged event.
BookmarkDetectedEventHandler	[To be supplied.]
SpeakCompletedEventHandler	[To be supplied.]
SpeakProgressChangedEventHandler	[To be supplied.]
SynthesisEventHandler	[To be supplied.]
SynthesizePhonemeEventHandler	[To be supplied.]
SynthesizeVisemeEventHandler	[To be supplied.]

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AudioLevelChangedEventArgs Class

Note: This documentation is preliminary and is subject to change.

Provides data for the AudioLevelChanged event.

Definition

Visual Basic	Public Class **AudioLevelChangedEventArgs** Inherits *SynthesisEventArgs*
C#	public class **AudioLevelChangedEventArgs** : *SynthesisEventArgs*
Managed C++	public __gc class **AudioLevelChangedEventArgs** : public *SynthesisEventArgs*
JScript	public class **AudioLevelChangedEventArgs** extends *SynthesisEventArgs*

Members Table

Inheritance Hierarchy

Object [Leave]
SynthesisEventArgs
AudioLevelChangedEventArgs

Class Information

Namespace	System.Speech.Synthesis
Assembly	System.Speech (system.speech.dll)
Strong Name	System.Speech, Version=6.0.4044.0, Culture=neutral, PublicKeyToken=365143bb27e7ac8b

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AudioLevelChangedEventArgs Method

Note: This documentation is preliminary and is subject to change.

Sets the audio level for the specified speak operation.

Definition

```
Visual Basic
Public Sub AudioLevelChangedEventArgs( _
   ByVal speakToken As SpeakToken, _
   ByVal audioPosition As TimeSpan, _
   ByVal audioLevel As Integer _
)

C#
public AudioLevelChangedEventArgs(
   SpeakToken speakToken,
   TimeSpan audioPosition,
   int audioLevel
);

Managed C++
public: AudioLevelChangedEventArgs(
   SpeakToken* speakToken,
   TimeSpan audioPosition,
   int audioLevel
);

JScript
public function AudioLevelChangedEventArgs(
   speakToken : SpeakToken,
   audioPosition : TimeSpan,
   audioLevel : int
);
```

Parameters

speakToken	**System.Speech.Synthesis.SpeakToken**.
audioPosition	**System.TimeSpan**.
audioLevel	**System.Int32**.

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AudioLevel Property

Note: This documentation is preliminary and is subject to change.

Gets the audio level.

Definition

```
Visual Basic  Public ReadOnly Property AudioLevel As Integer
C#            public int AudioLevel { get; }
Managed C++   public: __property int get_AudioLevel();
JScript       public function get AudioLevel() : int
```

Property Value

System.Int32.

This property is read-only.

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BookmarkDetectedEventArgs Class

Note: This documentation is preliminary and is subject to change.

Error handler

Definition

Visual Basic	Public Class **BookmarkDetectedEventArgs** Inherits *SynthesisEventArgs*
C#	public class **BookmarkDetectedEventArgs** : *SynthesisEventArgs*
Managed C++	public __gc class **BookmarkDetectedEventArgs** : public *SynthesisEventArgs*
JScript	public class **BookmarkDetectedEventArgs** extends *SynthesisEventArgs*

Members Table

Inheritance Hierarchy

Object [Leave]
SynthesisEventArgs
BookmarkDetectedEventArgs

Class Information

Namespace	System.Speech.Synthesis
Assembly	System.Speech (system.speech.dll)
Strong Name	System.Speech, Version=6.0.4044.0, Culture=neutral, PublicKeyToken=365143bb27e7ac8b

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BookmarkDetectedEventArgs Method

Note: This documentation is preliminary and is subject to change.

[To be supplied.]

Definition

Visual Basic
```
Public Sub BookmarkDetectedEventArgs( _
   ByVal speakToken As SpeakToken, _
   ByVal audioPosition As TimeSpan, _
   ByVal bookmarkName As String _
)
```

C#
```
public BookmarkDetectedEventArgs(
   SpeakToken speakToken,
   TimeSpan audioPosition,
   string bookmarkName
);
```

Managed C++
```
public: BookmarkDetectedEventArgs(
   SpeakToken* speakToken,
   TimeSpan audioPosition,
   String* bookmarkName
);
```

JScript
```
public function BookmarkDetectedEventArgs(
   speakToken : SpeakToken,
   audioPosition : TimeSpan,
   bookmarkName : String
);
```

Parameters

speakToken	**System.Speech.Synthesis.SpeakToken**.
audioPosition	**System.TimeSpan**.
bookmarkName	**System.String**.

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BookmarkName Property

Note: This documentation is preliminary and is subject to change.

Gets the name of the Bookmark.

Definition

Visual Basic
```
Public ReadOnly Property BookmarkName As String
```

C#
```
public string BookmarkName { get; }
```

Managed C++
```
public: __property String* get_BookmarkName();
```

JScript
```
public function get BookmarkName() : String
```

Property Value

System.String.

This property is read-only.

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SpeakCompletedEventArgs Class

Note: This documentation is preliminary and is subject to change.

[To be provided]

Definition

Visual Basic	Public Class **SpeakCompletedEventArgs** Inherits *err! bad xref: frlrfSystemComponentModelAsyncCompletedEventArgsClassTopic; lookup failure; no href; no caption;*
C#	public class **SpeakCompletedEventArgs** : *err! bad xref: frlrfSystemComponentModelAsyncCompletedEventArgsClassTopic; lookup failure; no href; no caption;*
Managed C++	public __gc class **SpeakCompletedEventArgs** : public *err! bad xref: frlrfSystemComponentModelAsyncCompletedEventArgsClassTopic; lookup failure; no href; no caption;*
JScript	public class **SpeakCompletedEventArgs** extends *err! bad xref: frlrfSystemComponentModelAsyncCompletedEventArgsClassTopic; lookup failure; no href; no caption;*

Members Table

Inheritance Hierarchy

err! bad xref: frlrfSystemComponentModelAsyncCompletedEventArgsClassTopic; lookup failure; no href; no caption;

SpeakCompletedEventArgs

Class Information

Namespace	System.Speech.Synthesis
Assembly	System.Speech (system.speech.dll)
Strong Name	System.Speech, Version=6.0.4044.0, Culture=neutral, PublicKeyToken=365143bb27e7ac8b

---

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SpeakCompletedEventArgs Method

Note: This documentation is preliminary and is subject to change.

Event handler that is invoked when a Speak method has concluded.

Definition

Visual Basic

```
Public Sub SpeakCompletedEventArgs( _
    ByVal error As Exception, _
    ByVal canceled As Boolean, _
    ByVal speakToken As SpeakToken _
)
```

C#

```
public SpeakCompletedEventArgs(
    Exception error,
    bool canceled,
    SpeakToken speakToken
);
```

Managed C++

```
public: SpeakCompletedEventArgs(
    Exception* error,
    bool canceled,
    SpeakToken* speakToken
);
```

JScript

```
public function SpeakCompletedEventArgs(
    error : Exception,
    canceled : boolean,
    speakToken : SpeakToken
);
```

Parameters

error	**System.Exception**.
canceled	**System.Boolean**.
speakToken	**System.Speech.Synthesis.SpeakToken**.

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SpeakToken Property

Note: This documentation is preliminary and is subject to change.

[To be supplied.]

Definition

Visual Basic	Public ReadOnly Property **SpeakToken** As **SpeakToken**
C#	public **SpeakToken** **SpeakToken** { get; }
Managed C++	public: __property **SpeakToken*** get_**SpeakToken**();
JScript	public function get **SpeakToken**() : **SpeakToken**

Property Value

System.Speech.Synthesis.SpeakToken.

This property is read-only.

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SpeakProgressChangedEventArgs Class

Note: This documentation is preliminary and is subject to change.

[To be supplied.]

Definition

Visual Basic	Public Class **SpeakProgressChangedEventArgs** Inherits *SynthesisEventArgs*
C#	public class **SpeakProgressChangedEventArgs** : *SynthesisEventArgs*
Managed C++	public __gc class **SpeakProgressChangedEventArgs** : public *SynthesisEventArgs*
JScript	public class **SpeakProgressChangedEventArgs** extends *SynthesisEventArgs*

Members Table

Inheritance Hierarchy

Object Leave

SynthesisEventArgs

SpeakProgressChangedEventArgs

Class Information

Namespace	System.Speech.Synthesis
Assembly	System.Speech (system.speech.dll)
Strong Name	System.Speech, Version=6.0.4044.0, Culture=neutral, PublicKeyToken=365143bb27e7ac8b

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SpeakProgressChangedEventArgs Method

Note: This documentation is preliminary and is subject to change.

Event handler that is invoked when a Speak method is in progress.

Definition

Visual Basic

```
Public Sub SpeakProgressChangedEventArgs( _
   ByVal speakToken As SpeakToken, _
   ByVal audioPosition As TimeSpan, _
   ByVal characterPosition As Integer _
)
```

C#

```
public SpeakProgressChangedEventArgs(
   SpeakToken speakToken,
   TimeSpan audioPosition,
   int characterPosition
);
```

Managed C++

```
public: SpeakProgressChangedEventArgs(
   SpeakToken* speakToken,
   TimeSpan audioPosition,
   int characterPosition
);
```

JScript

```
public function SpeakProgressChangedEventArgs(
   speakToken : SpeakToken,
   audioPosition : TimeSpan,
   characterPosition : int
);
```

Parameters

speakToken	**System.Speech.Synthesis.SpeakToken**.
audioPosition	**System.TimeSpan**.
characterPosition	**System.Int32**.

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CharacterPosition Property

Note: This documentation is preliminary and is subject to change.

Gets the current character position within text where speech is being synthesized.

Definition

Visual Basic	Public ReadOnly Property **CharacterPosition** As **Integer**
C#	public **int** **CharacterPosition** { get; }
Managed C++	public: __property **int** get_**CharacterPosition**();
JScript	public function get **CharacterPosition**() : **int**

Property Value

System.Int32.

This property is read-only.

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SpeakToken Class

Note: This documentation is preliminary and is subject to change.

Represents a single speak operation.

Definition

Visual Basic	Public Class **SpeakToken** Inherits *Object*
C#	public class **SpeakToken** : *Object*
Managed C++	public __gc class **SpeakToken** : public *Object*
JScript	public class **SpeakToken** extends *Object*

Members Table

Inheritance Hierarchy

Object Leave

SpeakToken

Class Information

Namespace	System.Speech.Synthesis
Assembly	System.Speech (system.speech.dll)
Strong	System.Speech, Version=6.0.4044.0, Culture=neutral,

Name PublicKeyToken=365143bb27e7ac8b

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Cancel Method

Note: This documentation is preliminary and is subject to change.

Cancels a speak operation asynchronously.

Definition

Visual Basic	Public Sub **Cancel**()
C#	public **void Cancel**();
Managed C++	public: **void Cancel**();
JScript	public function **Cancel**() : **void**;

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ToString Method

Note: This documentation is preliminary and is subject to change.

Gets a string representing the content of a speak operation.

Definition

Visual Basic	Overrides Public Function **ToString**() As **String**
C#	public override **string ToString**();
Managed C++	public: **String* ToString**();
JScript	public override function **ToString**() : **String**;

Return Value

System.String.

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SpeechSynthesizer Class

Note: This documentation is preliminary and is subject to change.

[To be supplied.]

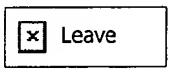
Definition

Visual Basic	Public Class **SpeechSynthesizer** Inherits *Object*
C#	public class **SpeechSynthesizer** : *Object*
Managed C++	public __gc class **SpeechSynthesizer** : public *Object*
JScript	public class **SpeechSynthesizer** extends *Object*

Members Table

Inheritance Hierarchy

Object



SpeechSynthesizer

Class Information

Namespace	System.Speech.Synthesis
Assembly	System.Speech (system.speech.dll)
Strong Name	System.Speech, Version=6.0.4044.0, Culture=neutral, PublicKeyToken=365143bb27e7ac8b

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Clear Method

Note: This documentation is preliminary and is subject to change.

[To be supplied.]

Definition

Visual Basic	Public Sub **Clear**()
C#	public **void Clear**();
Managed C++	public: **void Clear**();
JScript	public function **Clear**() : **void**;

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Dispose Method

Note: This documentation is preliminary and is subject to change.

[To be supplied.]

Overload List

public Void Dispose ()
public Void Dispose (Boolean)

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Finalize Method

Note: This documentation is preliminary and is subject to change.

[To be supplied.]

Definition

Visual Basic	Overrides Protected Sub **Finalize**()
C#	**~SpeechSynthesizer**();
Managed C++	**~SpeechSynthesizer**();
JScript	protected override function **Finalize**() : **void**;

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Pause Method

Note: This documentation is preliminary and is subject to change.

[To be supplied.]

Definition

Visual Basic	Public Sub **Pause**()
C#	public **void** **Pause**();
Managed C++	public: **void** **Pause**();
JScript	public function **Pause**() : **void**;

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Resume Method

Note: This documentation is preliminary and is subject to change.

[To be supplied.]

Definition

Visual Basic Public Sub **Resume**()
C# public **void** **Resume**();
Managed C++ public: **void** **Resume**();
JScript public function **Resume**() : **void**;

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Skip Method

Note: This documentation is preliminary and is subject to change.

[To be supplied.]

Definition

Visual Basic
```
Public Function Skip( _
   ByVal count As Integer, _
   ByVal unit As SpeechUnit _
) As Integer
```

C#
```
public int Skip(
   int count,
   SpeechUnit unit
);
```

Managed C++
```
public: int Skip(
   int count,
   SpeechUnit unit
);
```

JScript
```
public function Skip(
   count : int,
   unit : SpeechUnit
) : int;
```

Parameters

count **System.Int32**.
unit **System.Speech.Synthesis.SpeechUnit**.

Return Value

System.Int32.

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SpeechSynthesizer Method

Note: This documentation is preliminary and is subject to change.

[To be supplied.]

Definition

Visual Basic	Public Sub **SpeechSynthesizer**()
C#	public **SpeechSynthesizer**();
Managed C++	public: **SpeechSynthesizer**();
JScript	public function **SpeechSynthesizer**();

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CurrentToken Property

Note: This documentation is preliminary and is subject to change.

[To be supplied.]

Definition

Visual Basic	Public ReadOnly Property **CurrentToken** As **SpeakToken**
C#	public **SpeakToken CurrentToken** { get; }
Managed C++	public: __property **SpeakToken*** get_**CurrentToken**();
JScript	public function get **CurrentToken**() : **SpeakToken**

Property Value

System.Speech.Synthesis.SpeakToken.

This property is read-only.

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RateMultiplier Property

Note: This documentation is preliminary and is subject to change.

[To be supplied.]

Definition

Visual Basic	Public Property **RateMultiplier** As **Single**
C#	public **float RateMultiplier** { get; set; }
Managed C++	public: __property **float** get_**RateMultiplier**(); public: __property void set_**RateMultiplier**(**float**);
JScript	public function get **RateMultiplier**() : **float** public function set **RateMultiplier**(**float**);

Property Value

System.Single.

This property is read/write.

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SystemSynthesizer Property

Note: This documentation is preliminary and is subject to change.

[To be supplied.]

Definition

Visual Basic	Public Shared ReadOnly Property **SystemSynthesizer** As **SpeechSynthesizer**
C#	public static **SpeechSynthesizer SystemSynthesizer** { get; }
Managed C++	public: __property static **SpeechSynthesizer*** get_**SystemSynthesizer**();
JScript	public static function get **SystemSynthesizer**() : **SpeechSynthesizer**

Property Value

System.Speech.Synthesis.SpeechSynthesizer.

This property is read-only.

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VolumeMultiplier Property

Note: This documentation is preliminary and is subject to change.

[To be supplied.]

Definition

Visual Basic	Public Property **VolumeMultiplier** As **Single**
C#	public **float VolumeMultiplier** { get; set; }
Managed C++	public: __property **float** get_**VolumeMultiplier**(); public: __property void set_**VolumeMultiplier**(**float**);
JScript	public function get **VolumeMultiplier**() : **float** public function set **VolumeMultiplier**(**float**);

Property Value

System.Single.

This property is read/write.

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AudioLevelChanged Event

Note: This documentation is preliminary and is subject to change.

[To be supplied.]

Definition

Visual Basic	Public Event **AudioLevelChanged** As *AudioLevelChangedEventHandler*
C#	public event *AudioLevelChangedEventHandler* **AudioLevelChanged**;
Managed C++	public: __event **AudioLevelChanged**;
JScript	In JScript, you can use events, but you cannot define your own.

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SynthesizePhoneme Event

Note: This documentation is preliminary and is subject to change.

[To be supplied.]

Definition

Visual Basic	Public Event **SynthesizePhoneme** As *SynthesizePhonemeEventHandler*
C#	public event *SynthesizePhonemeEventHandler* **SynthesizePhoneme;**
Managed C++	public: __event **SynthesizePhoneme;**
JScript	In JScript, you can use events, but you cannot define your own.

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SynthesizeViseme Event

Note: This documentation is preliminary and is subject to change.

[To be supplied.]

Definition

Visual Basic	Public Event **SynthesizeViseme** As *SynthesizeVisemeEventHandler*
C#	public event *SynthesizeVisemeEventHandler* **SynthesizeViseme;**
Managed C++	public: __event **SynthesizeViseme;**
JScript	In JScript, you can use events, but you cannot define your own.

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SynthesisEventArgs Class

Note: This documentation is preliminary and is subject to change.

Event handler for SpeakStarting and future events. Base class for all Speech Synthesis events.

Definition

Visual Basic	Public Class **SynthesisEventArgs** Inherits *Object*
C#	public class **SynthesisEventArgs** : *Object*
Managed C++	public __gc class **SynthesisEventArgs** : public *Object*
JScript	public class **SynthesisEventArgs** extends *Object*

Members Table

Inheritance Hierarchy

Object [Leave]

SynthesisEventArgs

AudioLevelChangedEventArgs
BookmarkDetectedEventArgs
SpeakProgressChangedEventArgs
SynthesizePhonemeEventArgs
SynthesizeVisemeEventArgs

Class Information

Namespace	System.Speech.Synthesis
Assembly	System.Speech (system.speech.dll)
Strong Name	System.Speech, Version=6.0.4044.0, Culture=neutral, PublicKeyToken=365143bb27e7ac8b

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SynthesisEventArgs Method

Note: This documentation is preliminary and is subject to change.

Event handler for speech synthesis events.

Definition

Visual Basic

```
Public Sub SynthesisEventArgs( _
   ByVal speakToken As SpeakToken, _
   ByVal audioPosition As TimeSpan _
)
```

C#

```
public SynthesisEventArgs(
   SpeakToken speakToken,
   TimeSpan audioPosition
);
```

Managed C++	public: **SynthesisEventArgs**(**SpeakToken*** *speakToken*, **TimeSpan** *audioPosition*);
JScript	public function **SynthesisEventArgs**(*speakToken* : **SpeakToken**, *audioPosition* : **TimeSpan**);

Parameters

speakToken	**System.Speech.Synthesis.SpeakToken**.
audioPosition	**System.TimeSpan**.

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AudioPosition Property

Note: This documentation is preliminary and is subject to change.

Gets the position within the spoken text at which the synthesis event occurred.

Definition

Visual Basic	Public ReadOnly Property **AudioPosition** As **TimeSpan**
C#	public **TimeSpan AudioPosition** { get; }
Managed C++	public: __property **TimeSpan** get_**AudioPosition**();
JScript	public function get **AudioPosition**() : **TimeSpan**

Property Value

System.TimeSpan.

This property is read-only.

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SpeakToken Property

Note: This documentation is preliminary and is subject to change.

Gets the identity of the Speak method call that raised the synthesis event.

Definition

Visual Basic	Public ReadOnly Property **SpeakToken** As **SpeakToken**
C#	public **SpeakToken** **SpeakToken** { get; }
Managed C++	public: __property **SpeakToken*** get_**SpeakToken**();
JScript	public function get **SpeakToken**() : **SpeakToken**

Property Value

System.Speech.Synthesis.SpeakToken.

This property is read-only.

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SynthesizePhonemeEventArgs Class

Note: This documentation is preliminary and is subject to change.

[To be supplied.]

Definition

Visual Basic	Public Class **SynthesizePhonemeEventArgs** Inherits *SynthesisEventArgs*
C#	public class **SynthesizePhonemeEventArgs** : *SynthesisEventArgs*
Managed C++	public __gc class **SynthesizePhonemeEventArgs** : public *SynthesisEventArgs*
JScript	public class **SynthesizePhonemeEventArgs** extends *SynthesisEventArgs*

Members Table

Inheritance Hierarchy

Object [Leave]
SynthesisEventArgs
SynthesizePhonemeEventArgs

Class Information

Namespace	System.Speech.Synthesis
Assembly	System.Speech (system.speech.dll)
Strong	System.Speech, Version=6.0.4044.0, Culture=neutral,

Name PublicKeyToken=365143bb27e7ac8b

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SynthesizePhonemeEventArgs Method

Note: This documentation is preliminary and is subject to change.

[To be supplied.]

Definition

Visual Basic

```
Public Sub SynthesizePhonemeEventArgs( _
   ByVal speakToken As SpeakToken, _
   ByVal audioPosition As TimeSpan, _
   ByVal currentPhoneme As Integer, _
   ByVal duration As TimeSpan, _
   ByVal features As Integer, _
   ByVal nextPhoneme As Integer _
)
```

C#

```
public SynthesizePhonemeEventArgs(
   SpeakToken speakToken,
   TimeSpan audioPosition,
   int currentPhoneme,
   TimeSpan duration,
   int features,
   int nextPhoneme
);
```

Managed C++

```
public: SynthesizePhonemeEventArgs(
   SpeakToken* speakToken,
   TimeSpan audioPosition,
   int currentPhoneme,
   TimeSpan duration,
   int features,
   int nextPhoneme
);
```

JScript

```
public function SynthesizePhonemeEventArgs(
   speakToken : SpeakToken,
   audioPosition : TimeSpan,
   currentPhoneme : int,
   duration : TimeSpan,
   features : int,
   nextPhoneme : int
);
```

Parameters

speakToken	**System.Speech.Synthesis.SpeakToken.**
audioPosition	**System.TimeSpan.**
currentPhoneme	**System.Int32.**
duration	**System.TimeSpan.**
features	**System.Int32.**
nextPhoneme	**System.Int32.**

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CurrentPhoneme Property

Note: This documentation is preliminary and is subject to change.

[To be supplied.]

Definition

Visual Basic	Public ReadOnly Property **CurrentPhoneme** As **Integer**
C#	public **int CurrentPhoneme** { get; }
Managed C++	public: __property **int** get_**CurrentPhoneme**();
JScript	public function get **CurrentPhoneme**() : **int**

Property Value

System.Int32.

This property is read-only.

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Duration Property

Note: This documentation is preliminary and is subject to change.

[To be supplied.]

Definition

Visual Basic	Public ReadOnly Property **Duration** As **TimeSpan**
C#	public **TimeSpan Duration** { get; }
Managed C++	public: __property **TimeSpan** get_**Duration**();

JScript public function get **Duration**() : **TimeSpan**

Property Value

System.TimeSpan.

This property is read-only.

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NextPhoneme Property

Note: This documentation is preliminary and is subject to change.

[To be supplied.]

Definition

Visual Basic Public ReadOnly Property **NextPhoneme** As **Integer**
C# public **int** **NextPhoneme** { get; }
Managed C++ public: __property **int** get_**NextPhoneme**();
JScript public function get **NextPhoneme**() : **int**

Property Value

System.Int32.

This property is read-only.

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SynthesizeVisemeEventArgs Class

Note: This documentation is preliminary and is subject to change.

[To be supplied.]

Definition

Visual Basic Public Class **SynthesizeVisemeEventArgs**
Inherits *SynthesisEventArgs*
C# public class **SynthesizeVisemeEventArgs** : *SynthesisEventArgs*

Managed C++	public __gc class **SynthesizeVisemeEventArgs** : public *SynthesisEventArgs*
JScript	public class **SynthesizeVisemeEventArgs** extends *SynthesisEventArgs*

Members Table

Inheritance Hierarchy

Object [Leave]
SynthesisEventArgs
SynthesizeVisemeEventArgs

Class Information

Namespace	System.Speech.Synthesis
Assembly	System.Speech (system.speech.dll)
Strong Name	System.Speech, Version=6.0.4044.0, Culture=neutral, PublicKeyToken=365143bb27e7ac8b

---

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SynthesizeVisemeEventArgs Method

Note: This documentation is preliminary and is subject to change.

[To be supplied.]

Definition

Visual Basic

```
Public Sub SynthesizeVisemeEventArgs( _
   ByVal speakToken As SpeakToken, _
   ByVal audioPosition As TimeSpan, _
   ByVal currentViseme As Integer, _
   ByVal duration As TimeSpan, _
   ByVal features As Integer, _
   ByVal nextViseme As Integer _
)
```

C#

```
public SynthesizeVisemeEventArgs(
   SpeakToken speakToken,
   TimeSpan audioPosition,
   int currentViseme,
   TimeSpan duration,
   int features,
   int nextViseme
```

Managed C++

```
);
public: SynthesizeVisemeEventArgs(
   SpeakToken* speakToken,
   TimeSpan audioPosition,
   int currentViseme,
   TimeSpan duration,
   int features,
   int nextViseme
);
```

JScript

```
public function SynthesizeVisemeEventArgs(
   speakToken : SpeakToken,
   audioPosition : TimeSpan,
   currentViseme : int,
   duration : TimeSpan,
   features : int,
   nextViseme : int
);
```

Parameters

speakToken	**System.Speech.Synthesis.SpeakToken**.
audioPosition	**System.TimeSpan**.
currentViseme	**System.Int32**.
duration	**System.TimeSpan**.
features	**System.Int32**.
nextViseme	**System.Int32**.

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CurrentViseme Property

Note: This documentation is preliminary and is subject to change.

[To be supplied.]

Definition

Visual Basic
```
Public ReadOnly Property CurrentViseme As Integer
```

C#
```
public int CurrentViseme { get; }
```

Managed C++
```
public: __property int get_CurrentViseme();
```

JScript
```
public function get CurrentViseme() : int
```

Property Value

System.Int32.

This property is read-only.

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Duration Property

Note: This documentation is preliminary and is subject to change.

[To be supplied.]

Definition

Visual Basic	Public ReadOnly Property **Duration** As **TimeSpan**
C#	public **TimeSpan Duration** { get; }
Managed C++	public: __property **TimeSpan** get_**Duration**();
JScript	public function get **Duration**() : **TimeSpan**

Property Value

System.TimeSpan.

This property is read-only.

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NextViseme Property

Note: This documentation is preliminary and is subject to change.

[To be supplied.]

Definition

Visual Basic	Public ReadOnly Property **NextViseme** As **Integer**
C#	public **int NextViseme** { get; }
Managed C++	public: __property **int** get_**NextViseme**();
JScript	public function get **NextViseme**() : **int**

Property Value

System.Int32.

This property is read-only.

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Voice Class

Note: This documentation is preliminary and is subject to change.

[To be supplied.]

Definition

Visual Basic	Public Class **Voice** Inherits *Object* Implements *IDisposable*
C#	public class **Voice** : *Object*, IDisposable
Managed C++	public __gc class **Voice** : public *Object*, IDisposable
JScript	public class **Voice** extends *Object* implements *IDisposable*

Members Table

Inheritance Hierarchy

Object Leave

Voice

Class Information

Namespace	System.Speech.Synthesis
Assembly	System.Speech (system.speech.dll)
Strong Name	System.Speech, Version=6.0.4044.0, Culture=neutral, PublicKeyToken=365143bb27e7ac8b

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CancelSpeakAsync Method

Note: This documentation is preliminary and is subject to change.

[To be supplied.]

Definition

Visual Basic
```
Public Sub CancelSpeakAsync( _
   ByVal token As SpeakToken _
)
```

C#
```
public void CancelSpeakAsync(
   SpeakToken token
);
```

Managed C++
```
public: void CancelSpeakAsync(
   SpeakToken* token
);
```

JScript
```
public function CancelSpeakAsync(
   token : SpeakToken
) : void;
```

Parameters

token **System.Speech.Synthesis.SpeakToken**.

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Dispose Method

Note: This documentation is preliminary and is subject to change.

[To be supplied.]

Overload List

public Void Dispose ()
public Void Dispose (Boolean)

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Finalize Method

Note: This documentation is preliminary and is subject to change.

[To be supplied.]

Definition

Visual Basic	Overrides Protected Sub **Finalize**()
C#	**~Voice**();
Managed C++	**~Voice**();
JScript	protected override function **Finalize**() : **void**;

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Speak Method

Note: This documentation is preliminary and is subject to change.

Speaks the specified text using text-to-speech (TTS).

Overload List

public Void Speak (String)
public Void Speak (String, SpeakMediaType)

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SpeakAsync Method

Note: This documentation is preliminary and is subject to change.

[To be supplied.]

Overload List

public SpeakToken SpeakAsync (String)
public SpeakToken SpeakAsync (String, SpeakMediaType)

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SpeakFile Method

Note: This documentation is preliminary and is subject to change.

Speaks the contents of the specified file.

Overload List

public Void SpeakFile (String)
public Void SpeakFile (String, SpeakMediaType)

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SpeakFileAsync Method

Note: This documentation is preliminary and is subject to change.

[To be supplied.]

Overload List

public SpeakToken SpeakFileAsync (String)
public SpeakToken SpeakFileAsync (String, SpeakMediaType)

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Voice Method

Note: This documentation is preliminary and is subject to change.

[To be supplied.]

Overload List

public Voice ()
public Voice (VoiceAttributes)
public Voice (VoiceAttributes, SpeechSynthesizer)

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Attributes Property

Note: This documentation is preliminary and is subject to change.

Gets the attributes describing the characteristics of the voice.

Definition

Visual Basic	Public ReadOnly Property **Attributes** As **VoiceAttributes**
C#	public **VoiceAttributes** **Attributes** { get; }
Managed C++	public: __property **VoiceAttributes*** get_**Attributes**();
JScript	public function get **Attributes**() : **VoiceAttributes**

Property Value

System.Speech.Synthesis.VoiceAttributes.

This property is read-only.

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Priority Property

Note: This documentation is preliminary and is subject to change.

Gets and sets the speaking priority of the text.

Definition

Visual Basic	Public Property **Priority** As **SpeakPriority**
C#	public **SpeakPriority** **Priority** { get; set; }
Managed C++	public: __property **SpeakPriority** get_**Priority**(); public: __property void set_**Priority**(**SpeakPriority**);
JScript	public function get **Priority**() : **SpeakPriority** public function set **Priority**(**SpeakPriority**);

Property Value

System.Speech.Synthesis.SpeakPriority.

This property is read/write.

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Rate Property

Note: This documentation is preliminary and is subject to change.

Gets and sets the rate of speech used in text-to-speech (TTS) synthesis.

Definition

Visual Basic	Public Property **Rate** As **Single**
C#	public **float Rate** { get; set; }
Managed C++	public: __property **float** get_**Rate**(); public: __property void set_**Rate**(**float**);
JScript	public function get **Rate**() : **float** public function set **Rate**(**float**);

Property Value

System.Single.

This property is read/write.

Remarks

Rate must be a floating point value greater than zero.

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Synthesizer Property

Note: This documentation is preliminary and is subject to change.

Gets and Sets the synthesizer where the voice is to be used.

Definition

Visual Basic	Public Property **Synthesizer** As **SpeechSynthesizer**
C#	public **SpeechSynthesizer Synthesizer** { get; set; }
Managed C++	public: __property **SpeechSynthesizer*** get_**Synthesizer**(); public: __property void set_**Synthesizer**(**SpeechSynthesizer***);
JScript	public function get **Synthesizer**() : **SpeechSynthesizer** public function set **Synthesizer**(**SpeechSynthesizer**);

Property Value

System.Speech.Synthesis.SpeechSynthesizer.

This property is read/write.

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Volume Property

Note: This documentation is preliminary and is subject to change.

Gets and sets the volume level of text-to-speech (TTS) synthesis.

Definition

Visual Basic	Public Property **Volume** As **Single**
C#	public **float Volume** { get; set; }
Managed C++	public: __property **float** get_**Volume**(); public: __property void set_**Volume**(**float**);
JScript	public function get **Volume**() : **float** public function set **Volume**(**float**);

Property Value

System.Single.

This property is read/write.

Remarks

The value of Volume must be a floating point number between 0 and 100.

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BookmarkDetected Event

Note: This documentation is preliminary and is subject to change.

Occurs when a bookmark is detected.

Definition

Visual Basic	Public Event **BookmarkDetected** As *BookmarkDetectedEventHandler*
C#	public event *BookmarkDetectedEventHandler* **BookmarkDetected**;
Managed C++	public: __event **BookmarkDetected**;
JScript	In JScript, you can use events, but you cannot define your own.

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SpeakCompleted Event

Note: This documentation is preliminary and is subject to change.

[To be supplied.]

Definition

Visual Basic	Public Event **SpeakCompleted** As *SpeakCompletedEventHandler*
C#	public event *SpeakCompletedEventHandler* **SpeakCompleted;**
Managed C++	public: __event **SpeakCompleted;**
JScript	In JScript, you can use events, but you cannot define your own.

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SpeakProgressChanged Event

Note: This documentation is preliminary and is subject to change.

Occurs when speech in progress has changed, that is, each instance that change in speech is taking place.

Definition

Visual Basic	Public Event **SpeakProgressChanged** As *SpeakProgressChangedEventHandler*
C#	public event *SpeakProgressChangedEventHandler* **SpeakProgressChanged;**
Managed C++	public: __event **SpeakProgressChanged;**
JScript	In JScript, you can use events, but you cannot define your own.

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SpeakStarting Event

Note: This documentation is preliminary and is subject to change.

Event that occurs when speaking has begun.

Definition

Visual Basic	Public Event **SpeakStarting** As *SynthesisEventHandler*
C#	public event *SynthesisEventHandler* **SpeakStarting**;
Managed C++	public: __event **SpeakStarting**;
JScript	In JScript, you can use events, but you cannot define your own.

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VoiceAttributes Class

Note: This documentation is preliminary and is subject to change.

Represents the attributes of the text-to-speech (TTS) voice.

Definition

Visual Basic	Public Class **VoiceAttributes** Inherits *Object*
C#	public class **VoiceAttributes** : *Object*
Managed C++	public __gc class **VoiceAttributes** : public *Object*
JScript	public class **VoiceAttributes** extends *Object*

Members Table

Inheritance Hierarchy

Object Leave

VoiceAttributes

Class Information

Namespace	System.Speech.Synthesis
Assembly	System.Speech (system.speech.dll)
Strong Name	System.Speech, Version=6.0.4044.0, Culture=neutral, PublicKeyToken=365143bb27e7ac8b

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Age Property

Note: This documentation is preliminary and is subject to change.

Gets and sets the approximate age of the voice used in text-to-speech (TTS) synthesis. Optional.

Definition

Visual Basic	Public ReadOnly Property **Age** As **Integer**
C#	public **int Age** { get; }
Managed C++	public: __property **int** get_**Age**();
JScript	public function get **Age**() : **int**

Property Value

System.Int32.

This property is read-only.

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Gender Property

Note: This documentation is preliminary and is subject to change.

Gets and sets the gender of the voice used in text-to-speech (TTS) synthesis.Optional.

Definition

Visual Basic	Public ReadOnly Property **Gender** As **VoiceGender**
C#	public **VoiceGender Gender** { get; }
Managed C++	public: __property **VoiceGender** get_**Gender**();
JScript	public function get **Gender**() : **VoiceGender**

Property Value

System.Speech.Synthesis.VoiceGender.

This property is read-only.

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Languages Property

Note: This documentation is preliminary and is subject to change.

Gets and sets cultural information about the voice used with text-to-speech (TTS) synthesis.

Definition

Visual Basic	Public ReadOnly Property **Languages** As **CultureInfo Class**()
C#	public **CultureInfo Class**[] **Languages** { get; }
Managed C++	public: __property **CultureInfo Class*** get_**Languages**();
JScript	public function get **Languages**() : **CultureInfo Class**[]

Property Value

System.Globalization.CultureInfo.

This property is read-only.

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Name Property

Note: This documentation is preliminary and is subject to change.

Gets and sets the platform-specific voice name used in text-to-speech (TTS) synthesis. Optional.

Definition

Visual Basic	Public ReadOnly Property **Name** As **String**
C#	public **string Name** { get; }
Managed C++	public: __property **String*** get_**Name**();
JScript	public function get **Name**() : **String**

Property Value

System.String.

This property is read-only.

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Vendor Property

Note: This documentation is preliminary and is subject to change.

Gets the name of the vendor of the voice used with text-to-speech (TTS) synthesis.

Definition

Visual Basic	Public ReadOnly Property **Vendor** As **String**
C#	public **string Vendor** { get; }
Managed C++	public: __property **String*** get_**Vendor**();
JScript	public function get **Vendor**() : **String**

Property Value

System.String.

This property is read-only.

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SpeakPriority Enumeration

Note: This documentation is preliminary and is subject to change.

Indicates the speaking priority

Definition

Visual Basic	Public Enum **SpeakPriority**
C#	public enum **SpeakPriority**
Managed C++	__value public enum **SpeakPriority**
JScript	public enum **SpeakPriority**

Constants

Constant Name	Description
Normal	Specifies that speech has normal priority.
High	Specifies that speech has high priority.

Enumeration Information

Namespace	System.Speech.Synthesis
Assembly	System.Speech (system.speech.dll)
Strong Name	System.Speech, Version=6.0.4044.0, Culture=neutral, PublicKeyToken=365143bb27e7ac8b

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SpeechUnit Enumeration

Note: This documentation is preliminary and is subject to change.

Specifies the unit of speech.

Definition

Visual Basic	Public Enum **SpeechUnit**
C#	public enum **SpeechUnit**
Managed C++	__value public enum **SpeechUnit**
JScript	public enum **SpeechUnit**

Constants

Constant Name	Description
Sample	Specifies that the unit of speech is one recorded analog value in a sound file.
Phoneme	Specifies that the unit of speech is a phoneme.
Word	Specifies that the unit of speech is a word.
Sentence	Specifies that the unit of speech is a sentence.
Paragraph	Specifies that the unit of speech is a paragraph.
Document	Specifies that the unit of speech is a document.

Enumeration Information

Namespace	System.Speech.Synthesis
Assembly	System.Speech (system.speech.dll)
Strong Name	System.Speech, Version=6.0.4044.0, Culture=neutral, PublicKeyToken=365143bb27e7ac8b

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VoiceGender Enumeration

Note: This documentation is preliminary and is subject to change.

Identifies the gender of the voice used in text-to-speech synthesis.

Definition

Visual Basic	Public Enum **VoiceGender**
C#	public enum **VoiceGender**
Managed C++	__value public enum **VoiceGender**
JScript	public enum **VoiceGender**

Constants

Constant Name	Description
Neutral	Specifies that the spoken voice used for text-to-speech (TTS) synthesis is gender neutral.
Male	Specifies that the voice used for text-to-speech (TTS) synthesis is male.
Female	Specifies that the voice used for text-to-speech (TTS) synthesis is female.

Enumeration Information

Namespace	System.Speech.Synthesis
Assembly	System.Speech (system.speech.dll)
Strong Name	System.Speech, Version=6.0.4044.0, Culture=neutral, PublicKeyToken=365143bb27e7ac8b

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SpeakMediaType Structure

Note: This documentation is preliminary and is subject to change.

SpeakMediaType identifies the format of the content to be spoken.

Definition

Visual Basic	Public Structure SpeakMediaType
C#	public struct SpeakMediaType
Managed C++	public __value struct SpeakMediaType
JScript	In JScript, you can use structures, but you cannot define your own.

Members Table

Structure Information

Namespace	System.Speech.Synthesis

Assembly	System.Speech (system.speech.dll)
Strong Name	System.Speech, Version=6.0.4044.0, Culture=neutral, PublicKeyToken=365143bb27e7ac8b

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Equals Method

Note: This documentation is preliminary and is subject to change.

Returns true if the specified object is a SpeakMediaType struct, and if it matches the media type of the current instance.

Overload List

public override Boolean Equals (Object)
public override Boolean Equals (SpeakMediaType)

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GetHashCode Method

Note: This documentation is preliminary and is subject to change.

Returns the hash code for this instance.

Definition

Visual Basic	Overrides Public Function **GetHashCode**() As **Integer**
C#	public override **int GetHashCode**();
Managed C++	public: **int GetHashCode**();
JScript	public override function **GetHashCode**() : **int**;

Return Value

System.Int32.

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op_Equality Method

Note: This documentation is preliminary and is subject to change.

Indicates that the two instances are equal.

Definition

Visual Basic

```
Public Shared Function op_Equality( _
   ByVal a As SpeakMediaType, _
   ByVal b As SpeakMediaType _
) As Boolean
```

C#

```
public static bool op_Equality(
   SpeakMediaType a,
   SpeakMediaType b
);
```

Managed C++

```
public: static bool op_Equality(
   SpeakMediaType a,
   SpeakMediaType b
);
```

JScript

```
public static function op_Equality(
   a : SpeakMediaType,
   b : SpeakMediaType
) : boolean;
```

Parameters

a **System.Speech.Synthesis.SpeakMediaType**.
b **System.Speech.Synthesis.SpeakMediaType**.

Return Value

System.Boolean.

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op_Inequality Method

Note: This documentation is preliminary and is subject to change.

Indicates that the two instances are not equal.

Definition

Visual Basic

```
Public Shared Function op_Inequality( _
   ByVal a As SpeakMediaType, _
   ByVal b As SpeakMediaType _
```